وزارة التعليم العالي والبحث العلمي
جهاز الاشراف والتقويم العلمي
دائرة ضمان الجودة والاعتماد الاكاديمي

إستمارة وصف البرنامج الأكاديمي لمسار بولونيا للكليات و المعاهد
للعام الدراسي ٢٠٢٥-٢٠٢٦

الجامعة : القادسية

الكلية : الطب البيطري

تاريخ الملىء: ٢٠٢٦

التوقيع:

إسم المعاون العلمي : أ.د. علاء عبد العزيز عبد

التاريخ: / /٢٠٢٦

دقق الملف من قبل:

شعبة ضمان الجودة والاداء الجامعي

اسم مدير شعبة ضمان الجودة والأداء الجامعي: أ.م.د. صبا فلاح كليف

التاريخ : / /٢٠٢٦

التوقيع:

أ.د. منير عبد الامير الفتلاوي

مصادقة السيد العميد

Scanned with CamScanner

Republic of Iraq - Ministry of Higher Education and Scientific Research

University of Al-Qadisiyah / College of Veterinary Medicine

Bachelor's degree in Veterinary Medicine and Surgery

Five years (Ten semesters) - 300 ECTS credits - 1 ECTS = 25 hr

Program Curriculum (2024 - 2025)

جمهورية العراق - وزارة التعليم العالي والبحث العلمي

جامعة القادسية - كلية الطب البيطري

بكالوريوس في الطب والجراحة البيطرية

خمس سنوات (عشرة فصول دراسية) - ٣٠٠ وحدة اوربية - كل وحدة اوربية = ٢٥ ساعة

المنهاج الدراسي للعام ٢٠٢٤-٢٠٢٥

Level	Semester	No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	SSWL (hr/w)						Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisite Module(s) Code
							CL (hr/w)	Lect (hr/w)	Lab (hr/w)	Pr (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
First	First	1	QU01	English language	اللغة الانكليزية	English	2						3	33	17	50	2.00	B	
		2	QU02	Democracy and Human rights	الديمقراطية وحقوق الانسان	Arabic	2						3	33	17	50	2.00	B	
		3	VET101	General Biology	علم الاحياء العام	English	3		2				3	78	122	200	8.00	B	
		4	VET102	Skeleton Anatomy	تشريح الهيكل العظمي	English	3		3				3	93	107	200	8.00	C	
		5	VET103	Animal Management	ادارة الحيوان	English	3		2				3	78	97	175	7.00	C	
		6	VET104	Biorisk Management	أدارة المخاطر البايولوجية	English	2						3	33	42	75	3.00	C	
						Total	**15**	**0**	**7**	**0**	**0**	**0**	**18**	**348**	**402**	**750**	**30.00**		

Level	Semester	No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	SSWL (hr/w)						Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisite Module(s) Code
							CL (hr/w)	Lect (hr/w)	Lab (hr/w)	Pr (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
First	Second	1	QU06	Arabic language	اللغة العربية	Arabic	2						3	33	17	50	2.00	B	
		2	QU04	Computer	الحاسوب	English	2		2				3	63	12	75	3.00	B	
		3	VET105	General Chemistry	الكيمياء العامة	English	2		2				3	63	87	150	6.00	B	
		4	VET106	Muscular Anatomy	تشريح العضلات	English	3		3				3	93	132	225	9.00	C	
		5	VET107	Animal Husbandry	تربية وتحسين الحيوان	English	2						3	33	92	125	5.00	C	
		6	VET108	Poultry Management	إدارة الدواجن	English	1		2				3	48	77	125	5.00	C	
						Total	**12**	**0**	**9**	**0**	**0**	**0**	**18**	**333**	**417**	**750**	**30.00**		

Republic of Iraq - Ministry of Higher Education and Scientific Research

University of Mosul - College of Veterinary Medicine

Bachelor's degree in Veterinary Medicine and Surgery

Five years (Ten semesters) - 300 ECTS credits - 1 ECTS = 25 hr

Program Curriculum (2025 - 2026)

جمهورية العراق - وزارة التعليم العالي والبحث العلمي

جامعة القادسية- كلية الطب البيطري

بكالوريوس في الطب والجراحة البيطرية

خمس سنوات (عشرة فصول دراسية) - ٣٠٠ وحدة اوربية - كل وحدة اوربية = ٢٥ ساعة

المنهاج الدراسي للعام ٢٠٢٥-٢٠٢٦

Level	Semester	No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	SSWL (hr/w)						Exam hr/sem	SSWL hr/sem	USSWL hr/sem	SWL hr/sem	ECTS	Module Type	Prerequisite Module(s) Code
							CL (hr/w)	Lect (hr/w)	Lab (hr/w)	Pr (hr/w)	Tut (hr/w)	Semn (hr/w)							
UGII	Three	1	QU08	Ba 'ath regime crimes	جرائم نظام البعث	English	2						3	33	17	50	2.00	B	
		2	VET201	Visceral Anatomy	التشريح الحشوي	English	2		3				3	78	72	150	6.00	C	
		3	VET202	Basic Histology	مبادئ علم الانسجة	English	2		2				3	63	62	125	5.00	C	
		4	VET203	General Physiology	علم الفسلجة العام	English	3		2				3	78	72	150	6.00	C	
		5	VET204	Basic Biochemistry	مبادئ الكيمياء الحياتية	English	2		2				3	63	62	125	5.00	C	
		6	VET205	Animal Nutrition	تغذية الحيوان	English	2		2				3	63	12	75	3.00	C	
		7	QU24	Computer2	الحاسوب2	English	2		2				3	63	12	75	3.00	B	
						Total	**15**	**0**	**13**	**0**	**0**	**0**	**21**	**441**	**309**	**750**	**30.00**		
	Four	1	VET206	Neural and vascular Anatomy	تشريح الجهاز العصبي والوعائي	English	2		3				3	78	72	150	6.00	C	
		2	VET207	Biochemistry	الكيمياء الحياتية	English	2		2				3	63	62	125	5.00	C	
		3	VET208	Systemic Histology and Embryology	علم الانسجة الجهازي والاجنة	English	3		2				3	78	72	150	6.00	C	
		4	VET209	Systemic Physiology	علم الفسلجة الجهازي	English	3		2				3	78	72	150	6.00	C	
		5	VET210	Applied Statistics	الاحصاء التطبيقي	English	1		2				3	48	27	75	3.00	C	
		6	QU26	Arabic language2	اللغة العربية2	Arabic	2						3	33	17	50	2.00	B	
		7	QU21	English language2	اللغة الانكليزية2	English	2						3	33	17	50	2.00	B	
						Total	**15**	**0**	**11**	**0**	**0**	**0**	**21**	**411**	**339**	**750**	**30.00**		

Republic of Iraq - Ministry of Higher Education and Scientific Research
University of Al-Qadisiyah / College of Veterinary Medicine
Bachelor's degree in Veterinary Medicine and Surgery
Five years (Ten semesters) - 300 ECTS credits - 1 ECTS = 25 hr
Program Curriculum (2024 - 2025)

جمهورية العراق - وزارة التعليم العالي والبحث العلمي
جامعة القادسية - كلية الطب البيطري
بكالوريوس في الطب والجراحة البيطرية
خمس سنوات (عشرة فصول دراسية) - ٣٠٠ وحدة اوربية - كل وحدة اوربية = ٢٥ ساعة
المنهاج الدراسي للعام ٢٠٢٦-٢٠٢٧

Level	Semester	No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	SSWL (hr/w)						Exam hr/sem	SSWL hr/sem	USSWL hr/sem	SWL hr/sem	ECTS	Module Type	Prerequisite Module(s) Code
							CL (hr/w)	Lect (hr/w)	Lab (hr/w)	Pr (hr/w)	Tut (hr/w)	Semn (hr/w)							
Third	First	1	VET301	Helminthology	علم الديدان	English	2		2				3	63	62	125	5.00	C	
		2	VET302	General Pharmacology	علم الادوية العام	English	2		2				3	63	62	125	5.00	C	
		3	VET303	Veterinary Virology	علم الفيروسات البيطري	English	2		2				3	63	62	125	5.00	C	
		4	VET304	General Microbiology	علم الاحياء المجهرية العام	English	2		2				3	63	62	125	5.00	C	
		5	VET305	General Pathology	علم الامراض العام	English	2		2				3	63	62	125	5.00	C	
		6	VET306	Veterinary Immunology	علم المناعة البيطري	English	2		2				3	63	12	75	3.00	C	
		7	VET307	Genetics	الوراثة	English	2						3	33	17	50	2		
						Total	14	0	12	0	0	0	21	411	339	750	30.00		

Level	Semester	No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	SSWL (hr/w)						Exam hr/sem	SSWL hr/sem	USSWL hr/sem	SWL hr/sem	ECTS	Module Type	Prerequisite Module(s) Code
							CL (hr/w)	Lect (hr/w)	Lab (hr/w)	Pr (hr/w)	Tut (hr/w)	Semn (hr/w)							
Third	Second	1	VET308	Protozoa and Arthropod	الاوالي والمفصليات	English	2		2				3	63	62	125	5.00	C	
		2	VET309	Clinical Pharmacology and Toxicology	علم الادوية السريري والسموم	English	3		2				3	78	72	150	6.00	C	
		3	VET310	Systematic Bacteriology and Mycology	الجراثيم الجهازي والفطريات	English	2		2				3	63	62	125	5.00	C	
		4	VET311	Systemic Veterinary Pathology	علم الامراض البيطري الجهازي	English	3		2				3	78	72	150	6.00	C	
		5	VET312	Clinical Pathology	التشخيصات المرضية	English	3		2				3	78	72	150	6.00	C	
		6	VET313	Animal Physical examination	الفحص البدني للحيوان	English				2			3	33	17	50	2.00	C	
						Total	13	0	10	2	0	0	18	393	357	750	30.00		
						Total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		
						Total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#####	#REF!	#####	#####		Must be 300 ECTS

Note: The student should complete 9 weeks of Summer Veterinary Rotation Clinic to fullfil the requirements of the Bachelor's degree

Structured SWL (hr/w) type

CL	Class Lecture
Lab	Laboratory
Pr	Practical Training
Tut	Tutorial
Lect	Online lecture
Semn	Seminar

Module type

B	Basic learning activities
C	Core learning activity
S	Suport or related learning activity
E	Elective learning activity

SWL:	Student Workload
SSWL:	Structured SWL
USSWL:	Unstructured SWL

Note: Columns O, Q and R are progrmaed, protected and should not be edited

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Genetic**			**Module Delivery**	
Module Type				☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code					
ECTS Credits					
SWL (hr/sem)					
Module Level	2		**Semester of Delivery**	1	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Kadhim Hassan abbas		**e-mail**	Kadhim.abbas@qu.edu.iq	
Module Leader's Acad. Title	Assist. professor		**Module Leader's Qualification**	Master	
Module Tutor			**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1- Teaching live map DNA and RNA. 2- Teaching how protein make. 3- Teaching genetic diseases. 4- Teaching who traits transmission.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Traits transmission from parents to offspring 2- DNA and RNA role in live. 3- Selection of animals.
Indicative Contents المحتويات الإرشادية	Attention in selection traits to receive traits which pointed to high production

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Paying attention to the methods of selection to avoided bad traits and genetic diseases

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Genetics history and its theories
Week 2	The cell and chromosome behavior
Week 3	Mendelian inheritance and its modification
Week 4	Genetics and statistics in pedigree analysis
Week 5	Genes interaction
Week 6	Multiple alleles and pseudoalleles
Week 7	Sex determination and inheritance related to sex
Week 8	Terminology of horses
Week 9	Linkage, crossing over and genetic map
Week 10	Chromosomal mutations
Week 11	The chemical and engineering basis of heredity
Week 12	Gene frequency and factors affecting it
Week 13	Resemblance between relatives
Week 14	Selection
Week 15	Methods of matting
Week 16	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	**علم الوراثة والتطبيق في تربية الحيوانات**	Yes
Recommended Texts		
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**General Pharmacology**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET302				
ECTS Credits	5				
SWL (hr/sem)	**125**				
Module Level	3		**Semester of Delivery**	1	
Administering Department	Physiology, Biochemistry and Pharmacology		**College**	Veterinary Medicine	
Module Leader	Wisam Hassian Salman		**e-mail**	Wisam.salman@qu.edu.iq	
Module Leader's Acad. Title	Assist. Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Jinan Abd-alameer Sabeeh		**e-mail**	Jinan.Sabeeh@qu.edu.iq	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	8/8/2024		**Version Number**	1.0	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. The course deals with the basic concept of pharmacology as pharmacodynamics & pharmacokinetics. 2. Graduating students familiar with the basics of pharmacology. 3. They have experience in prescribing the drug and knowing its side effects And drug interactions. 4. Able to supervise pharmacies and veterinary clinics.

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Familiarity with the basics of pharmacology. 2. Studying the functions of the body's organs and the mechanism of action of various medications on them. 3. The student's scientific knowledge of how to calculate doses and prescribe medication accurately. 4. Skill in dealing with animals and methods of administering medications to them. 5. Knowing the interactions between medications, the side effects of each medication, and how to deal with them.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following: <u>Part A – General principles of pharmacology</u> • Pharmacodynamics. • Pharmacokinetic. [SSWL= 6 hrs] <u>Part B –drugs effects on the nervous system</u> • Drugs acting on autonomic and somatic nervous system. • Drugs acting on central nervous system. [SSWL=10 hrs] <u>Part C – drugs effects on:</u> • Gastrointestinal function. • Cardiovascular system & blood. • Renal function &fluid electrolyte balance. • Respiratory system. [SSWL=14 hrs] Total hrs = 30

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Encouraging the student's commitment to attendance and active participation in lectures and taking daily, semester and final theoretical and practical exams. Using educational and technological means, and the modern method in teaching the subject and referring to practical training examples. Discussion is used in lectures as an effective means of delivering the study material to students and keeping up with the latest methods, approaches and modern trends in the teaching process.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	General principles of pharmacology
Week 2	Pharmacodynamics
Week 3	Pharmacokinetics
Week 4	Drugs acting on the autonomic nervous system (sympathetic)
Week 5	Drugs acting on the autonomic nervous system (parasympathetic)
Week 6	Drugs acting on central nervous system (Neurotransmitters, Sedatives & Tranquilizers)
Week 7	Drugs acting on central nervous system (Anticonvulsant, Narcotic analgesics & CNS stimulants)
Week 8	Drugs acting on central nervous system (Inhalation, Injectable & local anesthetics)
Week 9	Drugs acting on gastrointestinal function.
Week 10	Drugs acting on the cardiovascular system (Digitalis, Positive Inotropes & Vasodilators)
Week 11	Drugs acting on the cardiovascular system (Antiarrhythmic Agents)
Week 12	Drug acting on Blood & Blood Elements (Anticoagulant , Antiplatelet & Hemostatic Drugs)
Week 13	Drugs affecting renal function & fluid electrolyte balance (Principles of Acid-Base Balance :Fluid & Electrolyte Therapy , Blood Substitutes)
Week 14	Drugs acting affecting renal function & fluid electrolyte balance (Diuretics &Renal Pharmacology)
Week 15	Drugs affecting the respiratory system
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered

Week 1	General principles and definition
Week 2	Drug form
Week 3	Metrology
Week 4	Dose calculation and dilution
Week 5	Lab animal technique, handling ,different dosing and sampling
Week 6	Effect ionization on absorption
Week 7	Analysis of alanine
Week 8	Effect of rout of administration on rate of absorption
Week 9	Effect of autonomic drugs on eye
Week 10	Effect of ketamine and xylazine
Week 11	Neuro-behavior test
Week 12	Diuretics
Week 13	Review & seminars
Week 14	Review & seminars
Week 15	Review & seminars

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Veterinary Pharmacology & Therapeutic. By Jim E, Riviere and Mark G.Papich. 10 edition, 2018.	Yes
Recommended Texts	Saunders Handbook of Veterinary Drugs, Small and Large Animals,4 edition, 21016.	Yes
Websites	https://www.wiley.com/en-us/Veterinary+Pharmacology+and+Therapeutics%2C+10th+Edition-p-9781118855881	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Veterinary Virology			**Module Delivery**	
Module Type	C			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET303				
ECTS Credits	5				
SWL (hr/sem)	125				
Module Level	3		**Semester of Delivery**	1	
Administering Department	Microbiology and parasitology		**College**	Veterinary medicine	
Module Leader	Shujon Hassan Jadaan		**e-mail**	Shujon.jadaan @qu.edu.iq	
Module Leader's Acad. Title	Lecture		**Module Leader's Qualification**	PHD	
Module Tutor	Zeen Fouad Saleh		**e-mail**	Zeen .saleh@ qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	11\8\2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1- Essential of Veterinary Virology covers the concise view of general virology concept and description of family of viruses producing important diseases in livestock and poultry. 2- To deepen and broaden students' understanding of the fundamental virology the methods by which virus transmitted to animals and how this effected on human healthy as well as country economic. 3- How to deal with virology samples in laboratory.
Module Learning Outcomes	1-Preparing students with high knowledge of the dangerous Zoonosis virus all means of protection and how to deal with it 2-prepare the graduate students with full Knowledge about research skills for

مخرجات التعلم للمادة الدراسية	professional careers in virology. 3-adequate Knowledge how diagnosis and treated animals and policy of vaccination animals
Indicative Contents المحتويات الإرشادية	1-Reflects content related points that learner might make but is not an exhaustive list. 2-The subject specific content that students may have provided in response to the question.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1-Explanation of scientific subjects through theoretical lectures. 2- Training of students for practical applications in laboratories. 3-Student prepares scientific related reports.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**introduction to virology**
Week 2	**properties of animals virus**
Week 3	**viral classification**
Week 4	**replication of virus**
Week 5	**antiviral drugs**
Week 6	**viral genetic**
Week 7	**oncogenic virus**
Week 8	**Paramyxoviridae,**
Week 9	**Orthomyxoviridae**
Week 10	**Picornaviridae، caliciviridea**
Week 11	**Rhabdoviridae**
Week 12	**Bunyviridea, Togaviruses**
Week 13	**arterviridiae, Flaviviridea**
Week 14	**Herpesviridae and poxviridea**
Week 15	**Parvoviridea, Circoviridea, Adenoviridae, Papillomaviruses.**
Week 16	**Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Overview about diagnostic methods in virology
Week 2	Collection and preservation of viral specimens
Week 3	Electron microscopy
Week 4	Cultivation of virus in lab. animals
Week 5	Cultivation of virus in cell culture
Week 6	Sample preparation for virus isolation
Week 7	Hemagglutination test.
Week 8	Hemagglutination inhabitation test.
Week 9	neutralization technique
Week 10	immunofluorescence test: titration techniques (plague assay and endpoint)
Week 11	PCR
Week 12	
Week 13	
Week 14	
Week 15	
Week 16	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Vet.Microbiology	Yes
Recommended Texts	Review of veterinary Microbiology 2nd edition	
Websites	(scientific journals, reports...)Electronic References, Websites	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**General Pathology**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET305**				
ECTS Credits	**5**				
SWL (hr/sem)	**125**				
Module Level	3		**Semester of Delivery**	1	
Administering Department	Pathology and Poultry Diseases		**College**	Veterinary medicine	
Module Leader	Khalil Gazar Chelab		**e-mail**	Khalil.Chelab@qu.edu.iq	
Module Leader's Acad. Title	Prof.		**Module Leader's Qualification**	PhD	
Module Tutor	Atiaf Ghanim Rhayf		**e-mail**	Atiaf.Rhayf@qu.edu.iq	
Peer Reviewer Name	Hala Abbas Naji		**e-mail**	Hala.Naji@qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Areas of study include cellular adaptation of injury, necrosis, inflammation, wound healing and tumors. It forms the basis for the application of this knowledge to diagnose diseases in animals. 2. Adaptation to injury There are many external and internal stimuli that induce or exacerbate disease-related processes, including trauma, infection, poisoning, lack of blood flow, autoimmunity, inherited or acquired genetic damage, or development errors

	3. Necrosis is the irreversible destruction of cells as a result of severe injury under a situation in which the cell is unable to activate the metabolic pathways necessary to survive or regulated decomposition. 4. Repair of tissues as seen in wound healing is raised by inflammation. The process may proceed even before the decay of the precipited injury, by forming granular tissue. The healing process involves the proliferation of connective tissue cells, cells that form blood vessels as a result of hormonal growth signals. 5. Inflammation is a particularly complex and important reaction to tissue injury, and is especially important in the fight against infection. Acute infection is an undefined general response caused by tissue cells themselves, as well as specialized cells in the primary immune system and mechanisms previously developed for adaptive immunity. 6. Tumor formation, or "new growth," is the multiplication of cells independently of any physiological process. The most common examples of tumors are benign tumors and cancers. Tumors are caused by genetic changes that cause cells to activate genetic programs incorrectly. Dysplasia is an early indicator of the process of tumor formation in tissues, characterized by persistently poorly variability forms of immature cells.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding the mechanisms of changes that take place during the disease at the cellular level. 2. Study of pathogens. 3. Diagnosis of diseases. 4. Clarify the means of the body's response to damage and repair at the cellular level. 5. Understanding in-kind pathological phenomena such as transformation, mutation, atrophy, hypertrophy and inflammation. 6. Scientific research.
Indicative Contents المحتويات الإرشادية	General pathology is a fundamental discipline within medical and biological sciences that focuses on the mechanisms of disease. The contents typically covered in a general pathology course or textbook provide an in-depth understanding of how diseases develop, progress, and affect the body. Here's an outline of the indicative contents of general pathology: 1. Introduc8on to Pathology. 2. Cell Injury and Cell Death. 3. Inflammation. 4. Tissue Repair and Regeneration. 5. Hemodynamic Disorders. 6. Immunopathology. 7. Neoplasia. 8. Genetic Disorders. 9. Environmental and Nutritional Pathology.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم
1. Theoretical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training. 6. Field visits and research projects. 7. Active learning and collaborative learning.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to pathology.
Week 2	Mechanisms and Morphology of Cellular Injury, Adaptation.
Week 3	Mechanisms and Morphology of Cellular Death.
Week 4	Disturbance of Pigmentation (Jaundice/ Types and causes and formation of hemosiderin, melanin, and calcification/ types and causes)**.**
Week 5	Inflammation (definition, causes, types of inflammatory cells, types of inflammation)**.**
Week 6	Inflammation (definition, causes, types of inflammatory cells, types of inflammation)**.**
Week 7	Healing and repair (Regeneration, Repair, Growth Factors, complications, bone healing).
Week 8	Disturbance of Circulation (Congestion and hemorrhage/ types and causes, thrombus and emboli: types and causes).
Week 9	Disturbance of Circulation (infarction, embolism edema / types and causes and shock)**.**
Week 10	Diseases of Immunity (hyper sensitivity and immune tolerance, immune deficiency and Autoimmune diseases).
Week 11	Neoplasia and Tumor Biology (definition/ theories of origin, classification)
Week 12	Neoplasia and Tumor Biology (differentiation between benign and malignant tumors/ histological characters of tumors/ method of transmission, diagnosis.
Week 13	Genetic Disorders (Types of Genetic Disorder: Single-gene, chromosomal, multifactorial, Mechanisms of Genetic Diseases: Mutations, epigenetic changes, Molecular Basis of Genetic Diseases: Gene function, expression, and regulation.
Week 14	Environmental and Nutritional Pathology (Environmental Factors: Chemical agents, physical agents, radiation).
Week 15	Nutritional Disorders: Malnutrition, obesity, vitamin deficiencies, metabolic syndrome**.**
Week 16	**Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction to pathology
Week 2	Mechanisms and Morphology of Cellular Injury, Adaptation.
Week 3	Mechanisms and Morphology of Cellular Death.
Week 4	Disturbance of Pigmentation (Jaundice/ Types and causes and formation of hemosiderin, melanin, and calcification/ types and causes)
Week 5	Inflammation (definition, causes, types of inflammatory cells, types of inflammation)
Week 6	Inflammation (definition, causes, types of inflammatory cells, types of inflammation)
Week 7	Healing and repair (Regeneration, Repair, Growth Factors, complications, bone healing)
Week 8	Disturbance of Circulation (Congestion and hemorrhage/ types and causes, thrombus and emboli: types and causes)
Week 9	Disturbance of Circulation (infarction, embolism, edema / types and causes and shock)
Week 10	Diseases of Immunity (hypersensitivity and immune tolerance, immune deficiency and Autoimmune diseases)
Week 11	Neoplasia and Tumor Biology (definition/ theories of origin, classification)
Week 12	Neoplasia and Tumor Biology (differentiation between benign and malignant tumors/ histological characters of tumors/ method of transmission, diagnosis)
Week 13	Genetic Disorders (Types of Genetic Disorders): Single-gene, chromosomal, multifactorial, Mechanisms of Genetic Diseases: Mutations, epigenetic changes, Molecular Basis of Genetic Diseases: Gene function, expression, and regulation
Week 14	Environmental and Nutritional Pathology: (Environmental Factors: Chemical agents, physical agents, radiation).
Week 15	Nutritional Disorders: Malnutrition, obesity, vitamin deficiencies, metabolic syndrome).
Week 16	**Exam**

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Title	**Helminthology**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET301**				
ECTS Credits	**5**				
SWL (hr/sem)	**125**				
Module Level		3	**Semester of Delivery**		1
Administering Department		Veterinary Microbiology and Parasitology	**College**	Veterinary medicine	
Module Leader	Noor Idan Jarad		**e-mail**	Noor.jarad@qu.edu.iq	
Module Leader's Acad. Title		Assist Prof.	**Module Leader's Qualification**		PhD
Module Tutor	Moneer Abd-Al Ameer		**e-mail**	monyerr.abd@qu.edu.iq	
Peer Reviewer Name		Noaman Naji A'aiz	**e-mail**	noaman.aaiz@qu.edu.iq	
Scientific Committee Approval Date		11/8/2024	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1.Explanation of scientific subjects through theoretical lectures. 2. Training of students for practical applications in laboratories. 3.Student prepare a scientific related reports. 4. Introducing students to the most important veterinary parasites and their life cycle medical important, ways of transmission and morbidity and treatment. 5. Developing the skills of students in the diagnosis of parasites and accurate diagnos each parasite. 6. Introduce students to modern diagnostic methods.
Module Learning Outcomes	1.The student is introduced to parasitology, the most important types of veterinary parasites, zoonotic parasites between humans and animals, their life cycle, methods

مخرجات التعلم للمادة الدراسية	of transmission, pathogenesis, and treatment. 2. The student acquires the skills of diagnostic methods for parasites and accurate diagnosis of each parasite 3.The student acquires the skills of modern diagnostic methods for parasites B3-The student acquires skills in treating and controlling parasitic diseases
Indicative Contents المحتويات الإرشادية	1-The learner provides assistance to classmates in class and engages in teamwork. 2- The student strives to maintain mutual respect between himself and his classmates, as we educational staff at the college. 3- The student is familiar with the ethics of the profession and the relationship with educato conscientious. 4. Writing abilities—enhancing students' capacity to write scientific reports to ai veterinary degrees.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1- The student knows the basic methods of sampling and population and how to take samples from the animal community 2- Enabling the student to know the importance of the parasite and how to display characteristics relevant to animal research and veterinary experiments 3- Enabling the student to know how to treatment the animal infected with parasite. 4 - The student will acquire the skills of using control programs of parasite disease 5 - The student acquires skills in diagnosis of different parasites with modern methods 6. The learner practices volunteer work with full awareness and understanding

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction & Definitions of Terms Effects of parasites on their hosts
Week 2	Phylum: Platyhelminthes / Families Anoplocephalidae
Week 3	Taeniidae,
Week 4	Davaineidae, Dipylidiidae,
Week 5	Hymenolepdidae , Dphillobothriidae
Week 6	Trematoda introduction
Week 7	Fasciolidae, Dicrocoelidae

Week 8	Paramhhistomatidae and Schistosomatdae
Week 9	Phylum nematode introduction
Week 10	Ascardidae Oxyuridae,
Week 11	Hetrakidae, Subuluridae
Week 12	Rhabditidae Strongyloididae
Week 13	Ancylostomatidae, Trichostrongylidae
Week 14	Dictyocaulidae · Metastrongyloidae
Week 15	Trichinellidae, Spiruridae, Trichuridae, Fillariidae
Week 16	**Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Introduction to parasite diagnosis
Week 2	Lab 2: Moniezia expansa, (Mature seg,scolex) M.bendeni, Avitellina (mature and gravid) Thysaniezia, (mature and gravid
Week 3	Lab 3: Raillietina (mature and gravid) R.tetragona scolex, R.echinobothrida(scolex), cesticillus(scolex), Dipylidium caninum
Week 4	Lab 4: Echinococcus granulosus +protoscolex of Hydatid cyst+Mesocestoides lineatus (mature and gravid), Spirometra (mature)
Week 5	Lab 5: Fasciola hepatica, Life cycle, Fasciola gigantica Dicrocoelium dendriticum,
Week 6	Lab 6: Metagonimus yokcagawi Paramphistomatidae(3 genuses)
Week 7	Lab 7: Metagonimus yokcagawi Paramphistomatidae(3 genuses)
Week 8	Lab 8: Schistoma (male,female) In copulation,eggs of S.mansoni,eggs, S.japonicum+cercaria
Week 9	Lab 9:Parascaris equorum+ Toxocara canis +Oxyuris equi
Week 10	Lab 10: Ascaridia galli +Hetrakis gallinarum +Subulura brumptii
Week 11	Lab 11: Strongylidae copulatory bursa, Strongylus vulgaris+S. equines

Week 12	Lab 12:Ancylostoma caninum, Bunostomum sp
Week 13	Lab 13:Haemonchus contortus, (male and female), Ostertagia(3 sp) Dictyocalus filarial(male)
Week 14	Lab 14: Habronema (male,female), Thelazia, Setaria digiata(female)
Week 15	Lab 15: Trichinella spiralis(larval stage), Trichuris trichura
Week 16	**Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Parasitology for Veterinarians 10th ed. Main references (sources)	Yes
Recommended Texts	Foundations of Parasitology 9th ed. 2013	No
Websites	Centers for Disease Control and Prevention (cdc.gov) https://www.cdc.gov/	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	General Microbiology			**Module Delivery**	
Module Type	C			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET304				
ECTS Credits	5				
SWL (hr/sem)	125				
Module Level		3	**Semester of Delivery**		1
Administering Department		Veterinary Microbiology	**College**	Veterinary medicine	
Module Leader	Azhar Abdulsada Neamah		**e-mail**	azhar.neamah@qu.edu.iq	
Module Leader's Acad. Title		Assist.Prof	**Module Leader's Qualification**		MSC
Module Tutor	Jameela Radi Esmaeel		**e-mail**	Jameela.Esmaeel@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date		15/8/2024	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	• The Microbiology module provides a practical introduction to the classification of microorganisms, their importance in various environments, and their impact on the environment, animals and human health. • General basic knowledge on laboratory equipment and requirements for bacterial isolation. • Provide the knowledge on bacterial virulence factors.

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	After completion of this course students are expected to be able to: • Describe basic cell structure and its function. • Define the evolution of prokaryotic cells, its diversity. • Describe the essential concepts of microbial metabolisms and its metabolic diversity • Define the mutation and horizontal gene transfer and its effect to diversity of microorganisms. • Define the general characteristics of viruses related to their unique structures and genomes. • Describe the method for controlling microbial Growth • Demonstrate working and communication attitude effectively in team
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. - Description and integration the structure of bacteria and fungi - microbial Genetics. - Basic methods used in bacterial diagnosis - How Bacteriology relates to different diseases in human and animals.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• Teaching the students using interactive teaching environment. • Envolve the students in the lecture and implement online and in class Quizzes. • Empowers the student to apply general microbiology in real life aspects. • Training of students for practical applications in laboratories.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction and History of Microbiology
Week 2	Bacterial cell Structure and Function
Week 3	Bacterial Classification

Week 4	Bacterial Nutrition and Growth
Week 5	Sterilization and Disinfection
Week 6	Antibiotics and Chemotherapeutic Agents
Week 7	Bacterial Genetics
Week 8	Bacterial Virulence
Week 9	Normal Flora and Probiotics
Week 10	Mid Term Exam
Week 11	Rickettsia and Chlamydia
Week 12	Mycoplasma
Week 13	General Mycology
Week 14	General virology
Week 15	Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	General Laboratory Instructions
Week 2	Microscopes
Week 3	Sterilization and Disinfection
Week 4	Culture Media for Bacterial Growth
Week 5	Bacterial Nutrition and Growth
Week 6	Colony morphology
Week 7	Pure culture techniques
Week 8	Bacterial Motility
Week 9	Bacterial Morphology
Week 10	Bacterial Staining Techniques
Week 11	Bacterial Count
Week 12	Antibiotics Tests
Week 13	Biochemical Tests
Week 14	Mycology
Week 15	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	1. Black, J. 2017. Microbiology: Principles and Applications, 11th ed. John Wiley..	
Recommended Texts	BK Markey et al (2023) .Clinical Veterinary Microbiology, 2nd edition	
Websites	https://em100.edaptivedocs.net/GetDoc.aspx?doc=CLSI%20M23S3%20ED1:2023&scope=user	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Veterinary immunology			**Module Delivery**	
Module Type	C			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET306				
ECTS Credits	5				
SWL (hr/sem)	125				
Module Level		3	**Semester of Delivery**		1
Administering Department		Veterinary microbiology	**College**	Veterinary medicine	
Module Leader	Jenan Nadhim Sadeq		**e-mail**	Jinan.sadeq@qu.edu.iq	
Module Leader's Acad. Title			**Module Leader's Qualification**		
Module Tutor	Hayder.Najei ayiz		**e-mail**	Hayder.ayiz@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date		15-8-2024	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	The objective of the course is to help you understand: 1-Conceptualize how the innate and adaptive immune responses coordinate to fight invading pathogens. 2-Determine what immunomodulatory strategies can be used to enhance immune responses or to suppress unwanted immune responses such as might be required in hypersensitivity reactions, transplantations or autoimmune diseases
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. .Have a sound knowledge of the characteristics and roles of the cells and tissues which comprise the immune system. 2. Have a thorough command of the basic principles of immunology and how an immune response is activated and controlled. 3. Be able to illustrate and understand some useful applications of the principles of immunology.

	4. Have learned the basis of a number of laboratory techniques used in immunology.
Indicative Contents المحتويات الإرشادية	Indicative content includes: • Theme 1 – Cells and Tissue of the immune system (myeloid and lymphoid lineages, bone marrow, thymus, spleen, lymph nodes, mucosal associated lymphoid tissue, lymphatics and cellular movement). • Theme 2 – The innate immune response (non-specific external surface protection, innate immune cell recognition of foreign material, phagocytosis, inflammation and complement). • Theme 3 – Antigens and antigen receptors (antigens, immunogens, antibodies, T and B cell receptors, MHC class I and II, antigen presentation). • Theme 4 – The adaptive immune response: dynamics of the immune response (activation/costimulation/differentiation of T cells, cytokines, germinal centres, class switching, somatic hypermutation/affinity maturation). • Theme 5 – The adpative immune response: tolerance, hypersensitivity and mucosal immunity (central and peripheral tolerance mechanisms, type I/II/III/IV and V hypersensitivity, mucosal structure and functions, secretory IgA). • Practical session on enzyme-linked immunosorbent assays (ELISAs) and Flow Cytometry.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. To review the role of immune cells in protection from different types of pathogens 2. To discuss the types of cells involved in immune responses 3. To describe the nature of specificity in adaptive immune responses 4. To understand the role of lymphocyte recirculation in immune responses 5. To know the humeral and cellular components of the innate immune response. 6. To recognize the mechanisms of action of the components of the innate immune response

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
Week	**Material Covered**
Week 1	Principle of immunity and immune
Week 2-3	Immunoglobulin: Structure, variation, Function and synthesis
Week 4-5	Immunology of T and B cells
Week 6	Complement: Nature, Function and pathways

Week 7	Cell mediated immunity, antigen recognition by T cells
Week 8	Immunological tolerance
Week 9-10	Hypersensitivity, Mechanism
Week 11	Auto-immunity
Week 12	Transplantation
Week 13	Principle of immune genetics
Week 14	Immuno-anaphylaxis reaction
Week 15	Immunity of infection

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
Week	**Material Covered**
Week 1	Lab 1: Introduction to immunology labs
Week 2	Lab 2: Lab animals
Week 3-4	Lab 3-4: Preservation of antigens and antibodies
Week 5	Lab 5: Separation of immunoglobulin
Week 6	Lab 6: Complement test
Week 7	Lab 7: Precipitation test
Week 8	Lab 8:Agglutination test
Week 9	Lab 9: Neutralization test
Week 10-11	Lab 10-11: Separation of lymphocytes from blood and lymph nodes
Week 12	Lab 12: Preparation of antigens
Week 13	Lab 13: Leukocytes
Week 14	Lab 14: Phagocytosis

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	**by Markey .B. Clinical Veterinary Microbiology, 2nd Edition , Leonard Finola, Archambault Marie, Cullinane Ann, Maguire D**	Yes
Recommended Texts		
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Genetic**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET307**				
ECTS Credits	2				
SWL (hr/sem)	50				
Module Level	2		**Semester of Delivery**	1	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Kadhim Hassan abbas		**e-mail**	Kadhim.abbas@qu.edu.iq	
Module Leader's Acad. Title	Assist. professor		**Module Leader's Qualification**	Master	
Module Tutor			**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	5- Teaching live map DNA and RNA. 6- Teaching how protein make. 7- Teaching genetic diseases. 8- Teaching who traits transmission.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	4- Traits transmission from parents to offspring 5- DNA and RNA role in live. 6- Selection of animals.
Indicative Contents المحتويات الإرشادية	Attention in selection traits to receive traits which pointed to high production

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Paying attention to the methods of selection to avoided bad traits and genetic diseases

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Genetics history and its theories
Week 2	The cell and chromosome behavior
Week 3	Mendelian inheritance and its modification
Week 4	Genetics and statistics in pedigree analysis
Week 5	Genes interaction
Week 6	Multiple alleles and pseudoalleles
Week 7	Sex determination and inheritance related to sex
Week 8	Terminology of horses
Week 9	Linkage, crossing over and genetic map
Week 10	Chromosomal mutations
Week 11	The chemical and engineering basis of heredity
Week 12	Gene frequency and factors affecting it
Week 13	Resemblance between relatives
Week 14	Selection
Week 15	Methods of matting
Week 16	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	**علم الوراثة والتطبيق في تربية الحيوانات**	Yes
Recommended Texts		
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Clinical pathology** التشخيصات المرضية			**Module Delivery**	
Module Type	C			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET311**				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	**3**		**Semester of Delivery**	2	
Administering Department	Internal and preventive medicine		**College**	Veterinary medicine	
Module Leader	Ghassan Khudiar esmaeel		**e-mail**	Ghassan.esmaeel@qu.edu.iq	
Module Leader's Acad. Title	Assist Professor		**Module Leader's Qualification**	Ph.D	
Module Tutor	Mohammed Al-Saadi		**e-mail**	Mohammed.alsaadi@qu.edu.iq	
Peer Reviewer Name	Amjed Talib		**e-mail**	Amjed.talibqu.edu.iq	
Scientific Committee Approval Date	20/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1- How to collect sample from appropriate site of infected animal 2- Learning the outline and strategies for the accurate diagnosis. 3- Tracking that changes that occur in animal body in health and disease. 4- Learn how to differentiate between disease through the clinical pathological changes
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Learn how to detecting of water electrolyte imbalance 2- Learn how to test the function and detecting of the disturbance of glands 3- learn how to diagnosis of parasite 4- Learn how to measure and interpret the results Rumen fluid. 5- learn how to diagnosis of bacteria 6- how to examine milk 7- how to make antibacterial sensitivity test 8- learn outline of clinical immunology 9- learn to differentiated between exudate and transudate
Indicative Contents	Week 1and 2 Detecting of water electrolyte imbalance

المحتويات الإرشادية	Week 3,4 Test the function and detecting of the disturbance of glands Week 5,6,7,8 Diagnosis of parasite Week 9: Measure and interpret the results Rumen fluid Week 10& 11 Diagnosis of bacteria Week 11: Milk examination Week 12: Antimicrobial sensitivity test Week 13 ,14 Clinical immunology Week 15 Transudate and exudate

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	In theoretical part of the module we will explain the principle of clinical pathology including hematology, clinical microbiology, clinical biochemistry then we will have divided students in too small group and performed the actual test on clinical samples.

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction
Week 2	Terms
Week 3	Endocrinology
Week 4	Clinical parasitology
Week 5	Clinical parasitology
Week 6	Hematology
Week 7	Hematology
Week 8	Rumen fluid examination
Week 9	Clinical microbiology
Week 10	Clinical microbiology
Week 11	Exam

Week 12	Milk examination
Week 13	Antimicrobial sensitivity test
Week 14	Clinical immunology
Week 15	**Cancer diagnosis**
Week 16	**eaxam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Fecal examination
Week 2	Fecal examination
Week 3	Fecal examination
Week 4	Skin scraping examination
Week 5	Clinical microbiology
Week 6	Clinical microbiology
Week 7	Milk Examination(physical and chemical)
Week 8	Milk Examination (Bacterial)
Week 9	Antimicrobial sensitivity test
Week 10	Rumen fluid examination
Week 11	Serological test
Week 12	Serological test
Week 13	Tests of detection of toxic substances.
Week 14	Tests of detection of toxic substances.
Week 15	Revision (over - all).

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Textbook of clinical pathology	Yes
Recommended Texts	-	-
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Clinical Pharmacology and Toxicology**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET308				
ECTS Credits	**6**				
SWL (hr/sem)	**150**				
Module Level	3		**Semester of Delivery**	2	
Administering Department	Physiology, Biochemistry and Pharmacology		**College**	Veterinary Medicine	
Module Leader	Wisam Hassian Salman		**e-mail**	Wisam.salman@qu.edu.iq	
Module Leader's Acad. Title	Asist. Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Ishtar Adnan Alethari		**e-mail**	ishtar.alethari@qu.edu.iq	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	8/8/2024		**Version Number**	1.0	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	5. The course deals with graduating students who possess knowledge of medications intended for treating various medical conditions. 6. The students knowing the

	7. They have the experience to write the medical prescription in a scientific and accurate manner, relying on the basics they have been trained on in the practical classes. 8. They have Scientific basis for writing a prescription for the treatment of toxic cases. 9. Graduating students familiar with the basics of toxicology. 10. Able to supervise pharmacies and veterinary clinics.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Familiarity with the basics of pharmacotherapy. 2. Studying the functions of the body's organs and the mechanism of action of various medications on them. ٣. The student knows how to prescribe the appropriate doses for each medical condition, the side effects of each drug and drug interactions between them. 4. Students' ability to write the appropriate medical prescription with all its parts based on the laboratory and practical applications. 5. Skill in dealing with animals and methods of administering medications to them. 6. Knowing about the nature and source of drugs. ٧. Knowledge of how to prepare pharmaceutical preparations in the clinic or veterinary pharmacy and how to describe their preparation in the medical prescription. 8. Familiarity with Concepts and terminology of toxicology, Toxicokinetics and Toxicodynemics. ٩. The students have an experience in diagnosing poisoning cases and prescribing appropriate antidotes for each . ١٠. Students have sufficient experience to know the safety of medicines through calculation ED_{50},LD_{50} & TI.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following: <u>Part A – Antimicrobial drugs:</u> • Antibacterial drugs • Antifungal drugs • Antiviral drugs [SSWL= 9 hrs] <u>Part B –Chemotherapy of parasitic diseases:</u> • Antinematodal drugs • Anticestodal drugs • Antiprotozoan drugs [SSWL=6 hrs] <u>Part C- Dermatopharmacology:</u> • <u>Ectoparasiticides</u> • <u>Antiseptics</u> • <u>Disinfectants</u>

	[SSWL=3 Hrs] Part D-: • Endocrine pharmacology • Autocoids and anti-inflammatory • Growth promotors • Nanotherapy [SSWL=9 Hrs] Part E– Toxicology: • Concepts and terminology of toxicology, Toxicokinetics and toxicodynemics • Diagnostic aspects of toxicology , Antidotes and general treatment of poisoning • Diagnostic aspects of toxicology, Antidotes and general treatment of poison • House hold & industrial products, biotoxins and mycotoxin • Toxic plant , Eviromental polluation with toxicant • Pharmaceuticals poisoning [SSWL=18 hrs] **Total hrs = 45 hrs**

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Encouraging the student's commitment to attendance and active participation in lectures and taking daily, semester and final theoretical and practical exams. Using educational and technological means, and the modern method in teaching the subject and referring to practical training examples. Discussion is used in lectures as an effective means of delivering the study material to students and keeping up with the latest methods, approaches and modern trends in the teaching process.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Antibacterial drugs

Week 2	Antifungal drugs
Week 3	Antiviral drugs
Week 4	Chemotherapy of parasitic diseases (antinematodal, anticestodal and antiprotozoal drugs)
Week 5	Dermatopharmacology, Ectoparasiticides , Antiseptics and Disinfectants.
Week 6	Endocrine pharmacology
Week 7	Autacoids and Anti-inflammatory
Week 8	Growth promoters
Week 9	Nanotherapy
Week 10	Concepts and terminology of toxicology
Week 11	Toxicokinetics and toxicodynemics
Week 12	Diagnostic aspects of toxicology , Antidotes and general treatment of poisoning
Week 13	Diagnostic aspects of toxicology , Antidotes and general treatment of poisoning
Week 14	House hold & industrial products, biotoxins & mycotoxin
Week 15	Toxic plant , Environmental pollution with toxicant
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Nature and source of drugs
Week 2	Writing of prescription
Week 3	Pharmaceutical preparation for farm animals and poultry
Week 4	Despising of drugs lotion and solution
Week 5	Despising of drugs ointment and cream
Week 6	Despising of drug antacid and lanimante

Week 7	Analgesic drugs
Week 8	Dose response relationships (LD_{50}, LD_{50} ,TI)
Week 9	Sensitivity test and antibiotics
Week 10	Organophosphate poisoning in rats and mice
Week 11	Determination of blood cholinesterase activity
Week 12	Treatment of nitrite poisoning in mice
Week 13	Aspirin toxicity (comparison with acetaminophen)
Week 14	Review & seminars
Week 15	Review & seminars
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	**Available in the Library?**
Required Texts	Riviere, J. E., & Papich, M. G. (2018). Veterinary pharmacology and therapeutics (Tenth edition). Wiley Blackwell	Yes
Recommended Texts	Gupta, R. C. (2018). Veterinary toxicology : basic and clinical principles (Third edition). Academic Press, an imprint of Elsevier	Yes
Websites	https://www.wiley.com/en-us/Veterinary+Pharmacology+and+Therapeutics%2C+10th+Edition-p-9781118855881	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Systemic Veterinary Pathology**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET315**				
ECTS Credits	**6**				
SWL (hr/sem)	**150**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Pathology and Poultry Diseases		**College**	Veterinary medicine	
Module Leader	Khalil Gazar Chelab		**e-mail**	Khalil.Chelab@qu.edu.iq	
Module Leader's Acad. Title	Prof.		**Module Leader's Qualification**	PhD	
Module Tutor	Atiaf Ghanim Rhayf		**e-mail**	Atiaf.Rhayf@qu.edu.iq	
Peer Reviewer Name	Hala Abbas Naji		**e-mail**	Hala.Naji@qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	Preparing students at an advanced and specialized scientific level with the ability to understand systemic diseases in detail to prepare them for more specialized advanced stages in the field of diagnosing diseases and understanding the working .mechanism of veterinary animals
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding the mechanisms of changes that take place during the disease at the cellular level. 2. Study of pathogens. 3. Diagnosis of diseases.

	4. Clarify the means of the body's response to damage and repair at the cellular level. 5. Understanding in-kind pathological phenomena such as transformation, mutation, atrophy, hypertrophy and inflammation. 6. Scientific research.
Indicative Contents المحتويات الإرشادية	Veterinary systemic pathology involves the study of diseases affec.ng various organ systems in animals. It combines clinical pathology and histopathology to understand the mechanisms, progression, and effects of diseases at a systemic level. Below are indica.ve contents typically covered in a veterinary systemic pathology course or textbook: 1. Pathology of the Cardiovascular System. 2. Pathology of the Respiratory System. 3. Pathology of the Gastrointestinal System. 4. Pathology of the Urinary System. 5. Pathology of the Endocrine System. 6. Pathology of the Hematopoietic and Lymphatic Systems. 7. Pathology of the Nervous System. 8. Pathology of the Musculoskeletal System. 9. Pathology of the Integumentary System. 10.Pathology of the Reproduc.ve System. 11.Pathology of the Special Senses. These contents provide a comprehensive overview of the various organ systems and the pathological processes affec.ng them, which are essen.al for diagnosing and understanding diseases in veterinary practice.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم
Lectures: Explain the pathogenesis and pathological changes in different body systems. Case-Based Learning: Discuss clinical cases and relate symptoms to pathological findings. Practical Sessions: Examine gross lesions and histopathological slides. Microscopy: Identify cellular and tissue changes under the microscope. Problem-Based Learning: Develop diagnostic and analytical skills through veterinary cases. Group Discussions: Encourage collaboration and scientific reasoning. Visual Learning: Use images, diagrams, and videos of pathological lesions. Laboratory Demonstrations: Demonstrate necropsy techniques and tissue sampling. Self-Directed Learning: Encourage reading textbooks and scientific articles. Assessment and Feedback: Evaluate knowledge through quizzes, practical exams, and case reports.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**Diseases of Respiratory system** - Upper respiratory tract diseases (rhinitis, sinusitis) - Lower respiratory tract diseases (bronchitis, pneumonia).
Week 2	Lung pathology (emphysema, fibrosis, neoplasia) - Pleural diseases (pleuritis, pleural effusion).
Week 3	**Diseases of Cardiovascular system** - Diseases of the heart (myocardial infarction, cardiomyopathies) - Vascular pathology (arteriosclerosis, thrombosis) - Congenital heart defects - Inflammatory diseases (endocarditis, myocarditis) - Heart failure
Week 4	**Diseases of haemopoetic and lymphatic tissues** - Bone marrow pathology (anemia, leukemia) - Lymphoid organs (lymphadenitis, lymphoma, splenomegaly) - Blood disorders (coagulopathies, hemolytic anemia)
Week 5	**Diseases of digestive system** - Oral cavity diseases (development anomalies, stomatitis, neoplasia) Week
Week 6	**Diseases of digestive system** - Esophageal and gastric diseases (esophagitis, gastritis, ulcers) - Small and large intes.ne diseases (enteritis, colitis, tumors)
Week 7	**Diseases of digestive system** - Hepatobiliary pathology (hepatitis, cirrhosis, cholangitis) - Pancreatic diseases (pancreatitis, neoplasms)
Week 8	**Disease of urinary system** - Glomerular diseases (glomerulonephritis, amyloidosis) - Tubular and interstitial diseases (pyelonephritis, interstitial nephritis) - Renal failure (acute and chronic) - Urinary tract infections - Urolithiasis
Week 9	**Disease of Male genital system** - Male reproduc.ve system diseases (orchitis, prostatitis, testicular tumors)
Week 10	**Disease of Female genital system** - Female reproduc.ve system diseases (endometritis, ovarian tumors, mastitis) - Pregnancy-related pathology (abortion, dystocia) - Reproduc.ve neoplasms
Week 11	**Diseases of Muscol Skeletal system** - Bone diseases (osteomyelitis, osteoporosis, fractures) - Joint diseases (arthritis, degenera.ve joint disease) - Muscle pathology (myositis, muscular dystrophy) - Tumors of bone and muscle
Week 12	**Diseases of Nervous system** - Central nervous system diseases (encephalitis, meningitis, tumors) - Peripheral nervous system disorders (neuropathy, myopathy) - Neurodegenera.ve diseases - Trauma and its effects on the nervous system
Week 13	**Disease of Endocrine** - Pituitary gland pathology (hyperpituitarism, hypopituitarism) - Thyroid and parathyroid disorders (hyperthyroidism, hypothyroidism) - Adrenal gland pathology (Cushing's disease, Addison's disease) - Pancreatic endocrine disorders (diabetes mellitus, insulinoma)

Week 14	**Diseases of skin and accessory** - Skin diseases (dermatitis, alopecia, neoplasms) - Diseases of adnexal structures (sebaceous glands, sweat glands) - Cutaneous neoplasia - Autoimmune skin disorders
Week 15	**Diseases of eye and special organ -** Ocular diseases (conjunctivitis, uveitis, cataracts) - Ear diseases (otitis externa, interna, media, tumors) - Nasal cavity and sinus disorders.
Week 16	**Exam**

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Diseases of Respiratory system/ Upper respiratory tract.
Week 2	Diseases of Lung and Pleura.
Week 3	Diseases of Cardiovascular system.
Week 4	Diseases of haemopoetic and lymphatic tissues
Week 5	Diseases of digestive system.
Week 6	Diseases of digestive system.
Week 7	Diseases of digestive system.
Week 8	Diseases of urinary system
Week 9	Diseases of Male genital system
Week 10	Diseases of Female genital system
Week 11	Diseases of Muscol Skeletal system
Week 12	Diseases of Nervous system.
Week 13	Diseases of Endocrine
Week 14	Diseases of skin and accessory
Week 15	Diseases of eye and special organ
Week 16	**Exam**

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	**Available in the Library?**
Required Texts		yes
Recommended Texts		yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Animal physical examination **الفحص البدني للحيوان**			**Module Delivery**	
Module Type	C			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☒ **Practical** ☐ **Seminar**	
Module Code	VET312				
ECTS Credits	2				
SWL (hr/sem)	50				
Module Level	3		**Semester of Delivery**	2	
Administering Department	Internal and preventive medicine		**College**	Veterinary medicine	
Module Leader	Yahia ismail khudhair		**e-mail**	Yahia.khudiar@qu.edu.iq	
Module Leader's Acad. Title	Professor		**Module Leader's Qualification**	PhD	
Module Tutor	Raeda Nema Khadim		**e-mail**	vet21.post12@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	16\8\2024		**Version Number**	١	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1- Teaching students the basics of clinical examination of animals 2- Teaching students how to deal with medical cases and examine them in general and in private
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Training students on how to examine, get used to, and deal with animals, in addition to how to deal with animal keepers
Indicative Contents المحتويات الإرشادية	1. **Signalment**: Gather basic information (species, breed, age, sex, and reproductive status). 2. **History**: Collect medical and behavioral history from the owner.

	3. **General Appearance**: Assess the overall condition (body condition score, coat, behavior, etc.). 4. **Vital Signs**: Measure temperature, pulse, respiration rates, and check mucous membrane color. 5. **Cardiovascular Exam**: Listen to heart sounds and check pulse quality. 6. **Respiratory Exam**: Auscultate lungs and observe breathing effort. 7. **Gastrointestinal Exam**: Palpate the abdomen and assess bowel sounds. 8. **Musculoskeletal Exam**: Evaluate mobility and joint condition. 9. **Skin Assessment**: Check for lesions, parasites, and coat condition. 10. **Neurological Exam**: Test reflexes and coordination. 11. **Reproductive Exam**: Assess external reproductive organs if necessary. 12. **Urinary System Exam**: Palpate the bladder and assess urination.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Learning with field training on conducting clinical examinations on various animals, in addition to field examinations for the purpose of arriving at an accurate diagnosis of pathological cases, in addition to training the student on how to deal with breeders and asking appropriate questions for the purpose of collecting information and linking it with the results of the clinical examination and the surrounding conditions in order to diagnose the disease condition of an animal.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	How to exam animals
Week 2	How to deal with breeders
Week 3	How to deal with breeders
Week 4	Examination of temperature of large animals

Week 5	Examination of temperature of pet animals
Week 6	Examination of mucus membrane and mouth of animals
Week 7	Examination of pulse and heart in large animals
Week 8	Examination of pulse and heart in pet animals
Week 9	Exam
Week 10	Examination of lymph nodes
Week 11	Examination of respiration
Week 12	Examination of respiration
Week 13	Examination of rumen
Week 14	Examination of appetite and general attitude
Week 15	Revision

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Large animal internal medicine, textbook of the diseases of cattle, horses, sheep, pigs and goats	Yes
Recommended Texts	A textbook of preventive medicine, Clinical Examination of Farm Animals	yes
Websites	Research gate, google scholar	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Systematic Bacteriology and Mycology			**Module Delivery**	
Module Type	C			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET309				
ECTS Credits	5				
SWL (hr/sem)	125				
Module Level		3	**Semester of Delivery**		2
Administering Department		Veterinary Microbiology	**College**	Veterinary medicine	
Module Leader	Azhar Abdulsada Neamah		**e-mail**	azhar.neamah@qu.edu.iq	
Module Leader's Acad. Title		Assist.Prof	**Module Leader's Qualification**		MSC
Module Tutor	Jameela Radi Esmaeel		**e-mail**	Jameela.Esmaeel@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date		15/8/2024	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	• The Microbiology module provides a practical introduction to the classification of microorganisms, their importance in various environments, and their impact on the environment, animals and human health. • General basic knowledge on laboratory equipment and requirements for bacterial isolation. • Provide the knowledge on bacterial virulence factors.

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	After completion of this course students are expected to be able to: • Describe basic cell structure and its function. • Define the evolution of prokaryotic cells, its diversity. • Describe the essential concepts of microbial metabolisms and its metabolic diversity • Define the mutation and horizontal gene transfer and its effect to diversity of microorganisms. • Define the general characteristics of viruses related to their unique structures and genomes. • Describe the method for controlling microbial Growth • Demonstrate working and communication attitude effectively in team
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. - Description and integration the structure of bacteria and fungi - microbial Genetics. - Basic methods used in bacterial diagnosis - How Bacteriology relates to different diseases in human and animals.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• Teaching the students using interactive teaching environment. • Envolve the students in the lecture and implement online and in class Quizzes. • Empowers the student to apply general microbiology in real life aspects. • Training of students for practical applications in laboratories.

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Staphylococcus
Week 2	Streptococcus
Week 3	Corynebacterium, Listeria

Week 4	Bacillus
Week 5	Clostridium
Week 6	Actinomyces and Nocardia
Week 7	Actionbacillus, Pasteurella
Week 8	Haemophillus, Moraxella and Bordetella
Week 9	Pseudomonas (Burkholderia)
Week 10	Spharophorus, Enterobacteriaceae
Week 11	Brucella
Week 12	Leptospira, Campylobacter
Week 13	Mycobacterium
Week 14	Mycology
Week 15	Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Staphylococcus
Week 2	Streptococcus
Week 3	Corynebacterium
Week 4	Rhodococcus, Listeria
Week 5	Bacillus
Week 6	Clostridium and Anaerobic Condition
Week 7	Mycobacterium
Week 8	Pasteurella
Week 9	Pseudomonas (Burkholderia)
Week 10	Leptospira
Week 11	Brucella
Week 12	Enterobacteriaceae1
Week 13	Enterobacteriaceae2
Week 14	Fungi Morphology
Week 15	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	1. Black, J. 2017. Microbiology: Principles and Applications, 11th ed. John Wiley..	
Recommended Texts	BK Markey et al (2023) .Clinical Veterinary Microbiology, 2nd edition	
Websites	https://em100.edaptivedocs.net/GetDoc.aspx?doc=CLSI%20M23S3%20ED1:2023&scope=user	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Protozoa and Arthropod			**Module Delivery**	
Module Type	C			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET307				
ECTS Credits	5				
SWL (hr/sem)	125				
Module Level		3	**Semester of Delivery**		2
Administering Department		Veterinary Microbiology	**College**	Veterinary medicine	
Module Leader	Noor Idan Jarad		**e-mail**	Noor.jarad@qu.edu.iq	
Module Leader's Acad. Title		Assist Prof.	**Module Leader's Qualification**		Ph.D
Module Tutor	Moneer Abd-Al Ameer		**e-mail**	monyerr.abd@qu.edu.iq	
Peer Reviewer Name		Noaman Naji A'aiz	**e-mail**	noaman.aaiz@qu.edu.iq :	
Scientific Committee Approval Date		15-8-2024	**Version Number**		

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1.Explanation of scientific subjects through theoretical lectures. 2. Training of students for practical applications in laboratories. 3.Student prepare a scientific related reports. 4. Introducing students to the most important veterinary parasites and their life cycle medical important, ways of transmission and morbidity and treatment. 5. Developing the skills of students in the diagnosis of parasites and accurate diagnos each parasite.

	6. Introduce students to modern diagnostic methods.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1.The student is introduced to parasitology, the most important types of veterinary parasites, zoonotic parasites between humans and animals, their life cycle, methods of transmission, pathogenesis, and treatment. 2. The student acquires the skills of diagnostic methods for parasites and accurate diagnosis of each parasite 3.The student acquires the skills of modern diagnostic methods for parasites B3-The student acquires skills in treating and controlling parasitic diseases
Indicative Contents المحتويات الإرشادية	1.The learner provides assistance to classmates in class and engages in teamwork. 2- The student strives to maintain mutual respect between himself and his classmates, as we educational staff at the college. 3- The student is familiar with the ethics of the profession and the relationship with educato conscientious. 4. Writing abilities—enhancing students' capacity to write scientific reports to ai veterinary degrees.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1- The student knows the basic methods of sampling and population and how to take samples from the animal community 2- Enabling the student to know the importance of the parasite and how to display characteristics relevant to animal research and veterinary experiments 3- Enabling the student to know how to treatment the animal infected with parasite. 4 - The student will acquire the skills of using control programs of parasite disease 5 - The student acquires skills in diagnosis of different parasites with modern methods 6. The learner practices volunteer work with full awareness and understanding

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered

Week 1	Phylum: Protozoa introduction
Week 2	Trypanosomatidae
Week 3	Trichomonadae
Week 4	Monocercomonadidae
Week 5	Eimeriidae
Week 6	Sarcocystidae
Week 7	Plasmodiidae
Week 8	Cryptoseoridiidae
Week 9	Babesiidae, Theileriidae.
Week 10	Phylum: Arthropoda introduction
Week 11	Ioxdidae,Argasidae
Week 12	Sarcoptidae, Psoroptidae, Tabanidae
Week 13	Culicidae, Psychodidae,,Simuliidae, Oestridae
Week 14	Anthomyidae, Cimicidae, Haematopinida
Week 15	Ischnocera, Amblycera

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Trypanosoma brucei, T.equiperdium, T.evansi T.cruzi, Leishmania (Amastigete),
Week 2	*Trichomonas vaginalis* Entamoeba histolytica(trophozoite)
Week 3	Eimeria (life cycle),
Week 4	Sarcocystis, Toxoplasma gondii
Week 5	Cryptosporidium
Week 6	Plasmodium gallinaceum,
Week 7	Babesia:B.canis,B.motasi
Week 8	Theileria, Anaplasma
Week 9	Hard ticks, Hyalomma, Rhipicephalus, Boophilus and larva
Week 10	Soft tick(Argas persicus)
Week 11	Demodex folliculorum, Dermanyssus gallinae
Week 12	Psorptes, Sarcoptes
Week 13	Menacanthus straminus, Haematopinus suis Ctenocephalides canis, Xenopsylla cheopis, Cimex lectularis

Week 14	Anopheles,Culex, (male,female) pupa and larva, Simulium adult, Larva
Week 15	Oesteridae, Oestrus ovis, Hypoderma bovis, Gastrophilus Intestinalis

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Parasitology for Veterinarians 10th ed. Main references (sources)	Yes
Recommended Texts	Foundations of Parasitology 9th ed. 2013	No
Websites	Centers for Disease Control and Prevention (cdc.gov) https://www.cdc.gov/	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Skeleton Anatomy**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET102**				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Anatomy &histology		**College**	Veterinary medicine	
Module Leader	Sameer Ahamed		**e-mail**	Sameer.abidalredah@qu.edu.iq	
Module Leader's Acad. Title	professor		**Module Leader's Qualification**	PHD	
Module Tutor	Hassaneen Al-sharoot		**e-mail**	Hassaneen.sharoot@qu.edu.iq	
Peer Reviewer Name	Abdulrazzaq baqer		**e-mail**	Abdulrazzaq.alrabei@qu/edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Develop manual dissection skills and understand dissection methods through Applying techniques. 2. Understand the locations of organs in the animal body. 3. Explain the internal and external structure of organs inside the body.

	4. Anatomical comparison of organs between different animals. 5. Understand the importance of the skeleton in supporting the body and giving the external shape to animals.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 learning outcomes, preferably equal to the number of study weeks. 1. Identify the anatomical levels and some related anatomical terms 2. List the different terms associated with practical and theoretical anatomy. 3. Study the types of bones of the forelimb. 4. Discuss the scapula and humerus. 5. Describe the radius and ulna and the joint formed between them. 6. Explain the bones of the hand. 7. Identify the types of bones of the hand (carpal bones, metacarpal bones and finger bones). 8. Explain the joints of the forelimb. 9. Explain the bones of the pelvis. 10. Explain the bones of the thigh area. 11. Clarify the relationship between the bones of the tibia and fibula. 12- Explain the bones of the tarsal foot 13- Explain the bones of the metatarsal foot 14- Describe the bones of the finger 15- Explain the joints of the hindlimb
Indicative Contents المحتويات الإرشادية	Week 1 Learn about the anatomical levels and some important anatomical terms in addition to defining anatomy, its types and teaching methods (3 hour) Week 2 Definition of the skeletal structure and types of digestive structures (3 hour) Week 3 Study the scapula and humerus (3 hour) Week 4

	Explain the radius and ulna (3 hour) Week 5 Describe the wrist bones of the hand Week 6 Explain the metatarsal and finger bones (3 hour) Week 7 Explain the joints of the forelimb (3 hour) Week 8 Study the pelvic bones (3 hour) Week 9 Study the thigh area anatomically 3 hour) Week 10 Explain the tibia and fibula bones (3 hour) Week 11 Dissect the Achilles joint and identify its bones (3 hour) Week 12 Study the metatarsal bone (3 hour) Week 13 Study the finger Foot (3 hour) Week 14 Anatomy of the foot (3 hour) Week 15 Anatomical description of the joints of the hind leg (3 hour)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be followed in delivering this unit is to stimulate students' participation in dissection, while at the same time developing and enriching their skills in handling dissection instruments. This will be done

	through classroom, interactive lessons, as well as by conducting simple experiments that include sampling activities that interest students.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction Skeleton: Introduction, Methods of study, topographical and descriptive terms.
Week 2	General osteology: Skeleton, bones; types, structures, development, chemical and physical properties.
Week 3	The vertebral column, ribs, sternum, bones of thoracic and pelvic limbs
Week 4	General syndesmology (Arthrology): Joints, classifications, structures of synovial joint and Fibrous joint and cartilaginous joint.
Week 5	The joints of thoracic limb,
Week 6	The joints of pelvic limb.
Week 7	Common integument: Foot of horse, hoof, claw, stay apparatus (thoracic and pelvic limb).
Week 8	Myology: Types of muscles, structures and action.
Week 9	Accessory structures associated with skeletal muscles, nerves and vessels supply.
Week 10	Muscles of the limbs.
Week 11	Muscles of the thoracic and abdomen.
Week 12	Muscles of the head and neck.
Week 13	Endocrine glands: Pituitary gland and hypothalamus.
Week 14	Pineal body, thyroid gland.
Week 15	Parathyroid gland and adrenal gland.
Week 16	Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab / introduction of Anatomy and anatomical plane
Week 2	Lab/ scapula and humorous
Week 3	Lab/ radia and ulna
Week 4	Carpal bones
Week 5	Metacarpal bones
Week 6	Digit of forelimb
Week 7	Pelvic bones
Week 8	Femur and patella
Week 9	Tibia and fibula
Week 10	Tarsal bones
Week 11	Meta tarsal
Week 12	Digits of hind limb
Week 13	skull
Week 14	ribs
Week 15	Vertebra column
Week 16	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**

Required Texts	Bragulla, H., H. E. König and H.-G. Liebich (2007). Veterinary Anatomy of Domestic Mammals Textbook of veterinary anatomy	Yes
Recommended Texts	The anatomy of the domestic animal	Yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**General Biology**			**Module Delivery**	
Module Type	**B**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET101**				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Microbiology		**College**	Veterinary medicine	
Module Leader	Azhar Chafat Karawan		**e-mail**	Azhar.karawan@qu.edu.iq	
Module Leader's Acad. Title	Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Khilood Hamdan Fahed		**e-mail**	Khilod.hamdan@qu.edu.iq	
Peer Reviewer Name	Alyaa abdulhussein alsaedi		**e-mail**	Alyaa.alsaedi@qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1-Explain the General information of laboratory and the structue of microscop 2- Introduction definitions of terms and Origin of life. 3-Explain the Kingdoms of living world. 4-study the Structure of cell & functions and Theory of cell. 5-Understand the Molecular Biology and Nucleic acid types and functions ,Genes and chromosomes . 6-study the general characters of virus ,bacteria ,fungi ,yeast and protozoa.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1-List the groups of micro-organisms. 2-Define the cell and there structure and the functions of each part. 3-Identify the origin of life. 4-Discuss the kingdoms of living world. 5-Define the Genetic engineering Nucleic acid types. 6-List Laboratory equipments (Balance, water bath, ph meter, centrifuge, incubator).
dicative Contents المحتويات الإرشادية	Week 1 Introduction definitions of terms Week 2 Characteristics of living organisms Week 3 Taxonomy and Synopsis of animal phyla Week 4 Kingdom: Monera (Prokaryotic) Week 5 Kingdom:Protista(Eukaryotic) Week 6,7,8,9,10 Kingdom : Animalia,Subphylum Invertebrates Week 11,12,13,14,15 Subphylum: Vertebrata (Chordata)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is encourage the students by using the microscope and the Laboratory equipments (Balance, water bath, ph meter, centrifuge, incubator) .and expanding their critical thinking skills.this will be done through classroom .

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction and definitions of terms
Week 2	Origin of life
Week 3	Characteristics of living organisms
Week 4	Kingdoms of living world
Week 5	Kingdom: Monera(prokaryotic)
Week 6	Kingdom: Protista(Eukaryotic)
Week 7	Phylum: Sarcomastigophora
Week 8	Subphylum:Vertebrata(Chordata) Class :Amphibia(frog)
Week 9	Living organisms
Week 10	Comparison between Prokaryotic and Eukaryotic cells
Week 11	Mitosis and Meiosis
Week 12	Types of living tissues
Week 13	General characters of bacteria and viruses
Week 14	Nucleic acid types and functions
Week 15	Genes and Chromosomes
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Laboratory Equipments
Week 2	The Microscope

Week 3	The Cell: Structure of cell & function
Week 4	KingdomMonera/ Prokaryote/Bacteria
Week 5	Kingdom Protista/ Eukaryote (unicellular)/ Mastigophora
Week 6	Kingdom Protista / Eukaryote(unicellular)/ Sarcodena , Ciliophora ,Sporozoa
Week 7	Kingdom Animalia (multicellular) Invertebrates / Coelenterata / *Hydra*
Week 8	Kingdom Animalia (multicellular) Invertebrates Nematoda/Ascaris , Ancylostoma
Week 9	Kingdom Animalia (multicellular) Invertebrates Trematoda/Fasciola,Schistosoma
Week 10	Kingdom Animalia (multicellular) Invertebrates Cestoda/Taenia
Week 11	Kingdom Animalia / vertebrates / Frog , Fish
Week 12	Cell Division: Binary Fission, Mitosis and Meiosis
Week 13	Types of tissues
Week 14	Bacterial staining
Week 15	Preparatory week before the final Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	**General biology ,2021**	Yes
Recommended Texts	Concepts of Biology	No
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	**Biorisk Management**	**Module Delivery**
Module Type	**C**	**☒ Theory**

Module Code	**VET104**			☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
ECTS Credits	**3**				
SWL (hr/sem)	**75**				
Module Level		1	**Semester of Delivery**		1
Administering Department		Microbiology	**College**	Veterinary medicine	
Module Leader	Alyaa abdulhussein alsaedi		**e-mail**	Alyaa.alsaedi@qu.edu.iq	
Module Leader's Acad. Title		Assist.lacturar	**Module Leader's Qualification**		MCS
Module Tutor	Alaa Abd-Alkadum Jawad		**e-mail**	Alaa.Jawad@qu.edu.iq	
Peer Reviewer Name		Sabrin Nouri Digman	**e-mail**	Sabreen.noori@qu.edu.iq	
Scientific Committee Approval Date		11/8/2024	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	The module objectives are : 1-study the most important Biological materials in the environment. 2- Understand the Standard Microbiology Techniques and Safety . 3-Explain Decontamination and waste disposal . 4-Protecting workers from the risk of exposure to biological materials . 5-Directing and educating workers on how to dispose pf biological waste 6-Identifing the risk in case of biological safety and identifying the threat in case of biosecurity .
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- List the groups of biological risk 2- Define Biological Materials. 3- Learn how to Working with potentially infected animals. 4- Discuss First aid and emergency response in the Laboratories. 5- Standard Microbiology Techniques and Safety.
Indicative Contents المحتويات الإرشادية	The Indicative contents : 1-week 1, week 2 ,week 3,week 4 Introduction:the Biological Materials , Personal protective equipment . 2-week 5,week 6,week 7 week 8, week 9 Risks groups and Biosafety Levels , Standard Microbiology Techniques and Safety, Collections ,handling and transport of diagnostic speciments . 3- week 10, week 11 ,week 12, week 13 ,week 14 Working with potentially infected animals , Preparedness and response to Chemical ,Biological accidents.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is encourage the students by using the microscope and the Laboratory equipment and expanding their critical thinking skills.this will be done through classroom.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
Week	**Material Covered**
Week 1	**Introduction: Definitions & Concepts Risk, Hazard, Biorisk, Biosafety, and Biosecurity.**
Week 2	**Biological Materials (Bacteria, Viruses, Fungi, Parasites,** **Prions, Zoonotic pathogens, Toxins).**
Week 3	**Personal protective equipment (PPE).** **Types of PPE, Route of exposure to pathogens.**
Week 4	**Laboratory safety symbols and hazard signs.**
Week 5	**Risks groups and Biosafety Levels.**
Week 6	**Biosafety cabinet classes :Design, Operation, ,use and misuse.**
Week 7	**Standard Microbiology Techniques and Safety.**
Week 8	**Safe use of (pipettes ,centrifuge , homogenizers , shakers , blenders , and sonicators ,ampoules containing infectious materials) .**
Week 9	**Collection , handling and transport of diagnostic specimens.**
Week 10	**Decontamination and waste disposal.**
Week 11	**Working with potentially infected animals.** **General considerations.**
Week 12	**Hazardous chemicals (Routes of exposure, storage of chemicals, general rules regarding chemical incompatibilities.**
Week 13	**Toxic effects of chemicals, Explosive chemicals, Chemical spills , Compressed and liquefied gases).**
Week 14	**Preparedness and response to Chemical, Biological accidents:**

	- In the Laboratories. **- In the field.**
Week 15	**First aid and emergency response in the Laboratories.**
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts		**Yes**
Recommended Texts	**The biological laboratory risk management handbook** **WHO-Biosafety-Manual**	**No**
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية/ اللغة الانكليزية

Module Information معلومات المادة الدراسية		
Module Title	**اللغة الانكليزية**	**Module Delivery**
Module Type	B	☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**
Module Code	QU01	
ECTS Credits	2	
SWL (hr/sem)	50	

Module Level		1	**Semester of Delivery**		1
Administering Department		Physiology and pharm.	**College**	Veterinary medicine	
Module Leader	Ashtar Adnan Mohammed		**e-mail**	ishtar.alethari@qu.edu.iq	
Module Leader's Acad. Title		Assist. Prof	**Module Leader's Qualification**		PHD
Module Tutor	Ashtar Adnan Mohammed		**e-mail**	ishtar.alethari@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date		11/8/2024	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Introducing students to correct reading and writing in English. 2. Teaching students about the basic rules and grammars in English. 3. Promote students' success in the language levels of veterinary medicine by fostering the development of English skills.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. The knowledge, skills, values and ethics that a student must possess upon graduation from a particular course or educational program. 2. Enabling students to gain knowledge of the principles of speech and sentences and the types they consist of. 3. Enabling students to acquire knowledge of the correct pronunciation of English vocabulary, especially scientific vocabulary. 3. Students acquire the ability to speak correctly and in accordance with the principles of the language. 4. Students acquire the ability to pronounce letters correctly in line with the principles of language and vocabulary. 5. Students acquire the skill of writing sentences correctly and with the fewest possible mistakes.

Indicative Contents المحتويات الإرشادية	1. Tenses: which include description of all the tenses that used in English which help in writing and speaking such as; present, past simple tense and future tense, present and past continuous. 2. The fundamental concepts reading, listening and writing. 3. Vocabulary, including jobs, adjectives, verbs and nouns, opposite adjectives, personal information. 4. Skills work which focus on different subjects help in speaking and listening such as life, family, internet, food, countries, time, and lifestyle questionnaire. 5. The course explores the fundamental concepts and mechanisms behind every day English which is related to social expression, directions, everyday problems, making conversation, emails and prepositions of time

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Use of audio, visual and video presentation tools to engage students 2. Establish a conversation connected to daily life. 3. Motivate students to be passionate about their abilities to listen and speak. Students are more likely to be enthusiastic about potential career paths, as many consider them at the university level. 4. Asking intriguing questions at the beginning of the lecture stimulates students' curiosity and enthusiasm for the English language.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Grammar (am, are, is, my, your) / vocabulary (how are you, what is this in English, numbers [1-10], plurals) / skills work (speaking and practicing conversations) / everyday English (good morning, goodbye, goodnight, see you later, what a lovely day)

Week 2	Grammar (he, she, they, his, her and questions) / vocabulary (countries, adjectives and nouns) / skills work (reading and speaking, where are they from) / everyday English (numbers [11-30])
Week 3	Grammar (negatives [questions and short answers]) / vocabulary (jobs and personal information) / skills work (reading and listening and interview with students and role-play) / everyday English (social expressions [I'm sorry, excuse me…])
Week 4	Grammar (possessive adjectives, has, have, adjectives and noun) / vocabulary (the family and describing a friend) / skills work (reading, writing and listening) / everyday English (the alphabet, on the phone and saying email addresses)
Week 5	Grammar (present simple, "a" and "an", adjectives and noun) / vocabulary (sport, drink, food, adjectives, verbs, languages and nationalities) / skills work (listening, speaking and role-play) / everyday English (how much numbers [1-100] and prices)
Week 6	Grammar (present simple, questions and negatives, adverbs of frequency) / vocabulary (the time, verbs, nouns and words that go together) / skills work (speaking [lifestyle questionnaire]) / everyday English (days of the week and prepositions of time)
Week 7	Grammar (question words, pronouns, this and that) / vocabulary (adjectives, opposite adjectives and places) / skills work (reading, writing and role-play) / everyday English (can I?)
Week 8	Grammar (there is, there are, prepositions) / vocabulary (rooms and furniture, in and out of town) / skills work (reading and vocabulary, listening and writing) / everyday English (directions)
Week 9	Grammar (was, where, past simple and irregular verbs) / vocabulary (saying years, people and jobs, irregular verbs [have, do, go]) / skills work (listening and speaking, reading and speaking) / everyday English (what's your birthday?, months and ordinal numbers)
Week 10	Grammar (past simple, regular and irregular verbs, questions, negatives, ago) / vocabulary (weekend activities, time expression, sports and leisure, seasons) / skills work (speaking, listening and speaking, speaking and writing) / everyday English (making conversation, going sight-seeing)

Week 11	Grammar (can, cant, adverbs, request and offers) / vocabulary (verbs and nouns, adjectives and nouns, opposite adjectives) / skills work (reading and listening) / everyday English (everyday problems)
Week 12	Grammar (I'd like, "some" and "any", "like" and "would like") / vocabulary (shopping food in a restaurant role-play) / skills work (listening, reading and speaking) / everyday English (role-play signs all around)
Week 13	Grammar (present continuous, present simple) / vocabulary (colors, clothes, opposite verbs) / skills work (reading and listening) / everyday English (what's the matter?)
Week 14	Grammar (future plan, revision) / vocabulary (transport, revision) / skills work (reading and speaking, a mini autobiography) / everyday English (social expressions)
Week 15	Grammar (future tense, adverbs, adjectives) / vocabulary (university, signs) / skills work (listening, reading and speaking) / everyday English (argument and discussion)
Week 16	**Exam**

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	**Available in the Library?**
Required Texts	John and Liz Soars. New Headway Plus. Oxford University press. Digital edition.	yes
Recommended Texts	Juan Gmo. Moya Montaña. BASIC ENGLISH GRAMMAR STRUCTURES AND VOCABULARY. Santiago, enero de 2006	yes
Websites	file:///C:/Users/hsimoham/Downloads/Documents/curso-ingles.pdf	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**الديمقراطية وحقوق الأنسان**			**Module Delivery**	
Module Type	**B**			☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**QU02**				
ECTS Credits	**2**				
SWL (hr/sem)	**50**				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Anatomy &histology		**College**	Veterinary medicine	
Module Leader	محمد عبد جري		**e-mail**	Sameer.abidalredah@qu.edu.iq	
Module Leader's Acad. Title	مدرس		**Module Leader's Qualification**	PHD	
Module Tutor			**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	١- قدرة الناشط على معرفة أبعاد حقوق الإنسان لنزاع ما، وعلاقتها به. ٢- تعبير لإدراكهم واهتمامهم بدورهم في حماية أو تعزيز هذه الحقوق. ٣- تقييم انتقادي للردود المحتملة التي يمكن تقديمها. ٤- محاولة لتحديد أو إيجاد ردود جديدة. ٥-تكوين رأي في صدد الخيار الأكثر ملاءمة. ٦- تعبير عن الثقة وإدراك للمسؤولية والتأثير في كل من القرار ومفعوله.
Module Learning Outcomes	أ-الاهداف المعرفية أ١- استفادة الطلبة من معرفة انواع الحقوق ومجال تطبيقها. أ٢- توضيح المراحل التاريخية لحقوق الانسان ومدى تطورها.

مخرجات التعلم للمادة الدراسية	أ٣- معرفة مفهوم الحريات والديمقراطية بشكل الصحيح. أ٤- تزويد الطالب بالقيم الاخلاقية التي يتطلب الالتزام بها وتوضيح اهم الحقوق والواجبات المناطة للفرد. أ٥- التعرف على حقوق الفرد العراقي وواجباته
Indicative Contents المحتويات الإرشادية	ب- الأهداف المهاراتية الخاصة بالمقرر ١- التعريف بتاريخ حقوق الانسان ومراحل التطور. ٢- نشر الثقافة وتغذية الطالب من الجانب الاسلامي . ٣- كيفية الحفاظ على المجتمع والوطن من خلال تعزيز حب البلد لهم . ٤- التعرف على اهم الحقوق الممنوحة لهم وفق الاعراف والقوانين الدولية. ٥- تعزيز المواطنة لدى الطالب .

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	وهو يقدّم مشورة عملية للمدرّسين وغيرهم من المعلمين الذين يريدون إذكاء الوعي **بحقوق** الإنسان والعمل من أجلها في صفوف تلاميذ مرحلتي التعليم الأساسي والثانوي، بما في ذلك تقديم اقتراحات لاستحداث أنشطة تعلّم في هذا المجال.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**مفهوم حقوق الإنسان وخصائصها**
Week 2	الشخصية القانونية للإنسان
Week 3	حقوق الإنسان في الحضارات القديمة والدين الاسلامي
Week 4	خصائص الشخصية القانونية
Week 5	مفهوم الاهلية
Week 6	الموطن
Week 7	- حقوق الانسان في العصور الوسطى - حقوق الانسان في العصر الراهن
Week 8	-حقوق الانسان في الشرائع السماوية-
Week 9	اهم حقوق الانسان التي نصت عليها الشرائع (القران والسنة) والحكومات والمنظمات

Week 10	حقوق الانسان في الاسلام الامام علي بن ابي طالب بين الانسان وواجباته
Week 11	رسالة الامام السجاد (ع) في حقوق الانسان
Week 12	
Week 13	المنظمات غير الحكومية ودورها في الدفاع عن حقوق الانسان
Week 14	الحقوق والحريات في الدستور العراقي لعام ٢٠٠٥
Week 15	الاعلان العالمي لحقوق وحريات الانسان
Week 16	الامتحان

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	حقوق الانسان والديمقراطية الاستاذ علي عبودي نعمة	Yes
Recommended Texts	- حياة الامام زين العابدين (عليه السلام) دراسة وتحليل العلامة السيد باقر شريف القرشي. الاستاذ علي محمد دخيل	yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Animal Management**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET103**				
ECTS Credits	**7**				
SWL (hr/sem)	**175**				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Kadhem Hassan abbas		**e-mail**	Kadhem abbas@qu.edu.iq	
Module Leader's Acad. Title	Assist professor		**Module Leader's Qualification**	Master	
Module Tutor	Mohammed Mahdi Yassin		**e-mail**	Mohammed Yassin@qu.edu.iq	
Peer Reviewer Name	Mohamed Abdel Abbas Malaghi		**e-mail**	Mohamed Malaghi@qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Developing and understanding the principles of field animal management from a veterinary perspective in a way that supports the practical side of the profession 2. The ability to manage the animal field in the healthiest ways 3. Ability to deal with different animals
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Explanation of scientific subjects through theoretical lectures. 2. Training of students for practical applications in laboratories. **3.** Student prepare a scientific related reports.

Indicative Contents المحتويات الإرشادية	This course provides a description and specification of farm animals of all types and the different methods of raising them for productive purposes [SSWL= 1 hour] Psychological and behavioral characteristics of horses and their care and care of foals (young) [SSWL= 4 hours] Productive characteristics of cattle and their behavior and care of their newborns [SSWL= 6 hours] Characteristics of raising goats and their behavior and care [SSWL= 2 hours] Characteristics of raising sheep and their behavior and care [SSWL= 2 hours] Characteristics of raising buffaloes and their behavior and care [SSWL= 2 hours] Characteristics of raising camels and their behavior and care [SSWL= 3 hours] Methods of reproduction in different animals will be discussed and ways to maximize the benefit from reproduction and proper health management for them [SSWL= 4 hours] The course will also discuss one of the important aspects of wild animals and ways to preserve them as one of the components of environmental balance [SSWL= 4 hours] Total hrs = 90 = (Time table 3 hr x 15 weeks)- theoretical Total hrs = 30 = (Time table 2 hr x 15 weeks)- practical

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, Paying attention to the methods of approaching the animal, treating it and cleaning it with extreme caution and knowing the potential risks in order to increase the animal wealth, dealing with different animals and knowing the basic rules for their management, As well as using devices and tools that assist in controlling animals. This will be achieved through classroom and practical lessons that will help students understand and apply.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**Description and identification of farm animals**
Week 2	**Equine behavior**
Week 3	**Equine and foal care**
Week 4	**Calf and cattle management**
Week 5	**Cattle production**

Week 6	**Cattle behavior**
Week 7	**Goat management**
Week 8	**Sheep management**
Week 9	**Buffaloes management**
Week 10	**Camel management**
Week 11	**Buffaloes and camel behavior**
Week 12	**Management of Animal reproduction 1**
Week 13	**Management of Animal reproduction 2**
Week 14	**Wild animals 1**
Week 15	**Wild animals 2**
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	**Lab 1: External parts of Cattle**
Week 2	**Lab 2: External parts Equine**
Week 3	**Lab 3: Control and restrains of cattle**
Week 4	**Lab 4: Control and restrain of equine**
Week 5	**Lab 5: Age estimation in equine**
Week 6	**Lab 6: Age estimation in cows, sheep and goat**
Week 7	**Lab 7: Methods casting**
Week 8	**Lab 8: Signs of health**
Week 9	**Lab 9: Drug administration**
Week 10	**Lab 10: Milking**
Week 11	**Lab 11: Body score condition**
Week 12	**Lab 12: Animal Grooming**
Week 13	**Lab 13: Animal housing**
Week 14	**Lab 14: Animal examination**
Week 15	**Lab 15: Farm practices**
Week 16	**Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Animal Husbandry Regained / The Place of Farm Animals in Sustainable Agriculture	Yes
Recommended Texts	Animal management - Domestic animal behavior and welfare	yes
Websites	https://www.routledge.com/Animal-Husbandry-Regained-The-Place-of-Farm-Animals-in-Sustainable-Agriculture/Webster/p/book/9781849714211	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Muscular Anatomy**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET106**				
ECTS Credits	**9**				
SWL (hr/sem)	**225**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Anatomy &histology		**College**	Veterinary medicine	
Module Leader	Sameer Ahamed		**e-mail**	Sameer.abidalredah@qu.edu.iq	
Module Leader's Acad. Title	professor		**Module Leader's Qualification**	PHD	
Module Tutor	Hassaneen Al-sharoot		**e-mail**	Hassaneen.sharoot@qu.edu.iq	
Peer Reviewer Name	Abdulrazzaq baqer		**e-mail**	Abdulrazzaq.alrabei@qu/edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Develop manual dissection skills and understand dissection methods through Applying techniques. 2. Understand the locations of organs in the animal body. 3. Explain the internal and external structure of organs inside the body. 4. Anatomical comparison of organs between different animals. 5. Understand the importance of the skeleton in supporting the body and giving the external shape to animals.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 learning outcomes, preferably equal to the number of study weeks. 1. Identify the types of muscles and some related anatomical terms 2. List the different terms associated with practical and theoretical anatomy. 3. Study the types of muscles of the forelimb. 4. Study the types of muscles of the hind limb 5. Describe the male genital system. 6. Study the female genital system 7. Identify the urinary system
Indicative Contents المحتويات الإرشادية	Week 1 Learn about the types of muscles and some important anatomical terms in addition to defining anatomy, its types and teaching methods (3 hour) Week 2 Definition of the skeletal muscles and relationship between this muscles and skeleton (3 hour) Week 3 Study the scapula and humerus muscles (3 hour) Week 4 Explain the radius and ulna muscles (3 hour) Week 5 Describe the hind limb muscles Week 6 Explain pelvic regions muscles (3 hour) Week 7 Explain the tibia and fibula muscles (3 hour) Week 8 Study the male genital system (3 hour) Week 9 Study the female genital system(3 hour) Week 10 Explain the urinary system (3 hour)

	Week 11 Relationship between urogenital system Week 12 Study the different male genital system between horse , ox and dog (3 hour) Week 13 Study the different female genital system between horse , ox and dog (3 hour) Week 14 Anatomy of the urinary system in chattels, horse, sheep and dog(3 hour) Week 15 Anatomical description of the eye and ear (3 hour)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be followed in delivering this unit is to stimulate students' participation in dissection, while at the same time developing and enriching their skills in handling dissection instruments. This will be done through classroom, interactive lessons, as well as by conducting simple experiments that include sampling activities that interest students.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction
Week 2	Anatomy of male genital system (scrotum testes, epididymis)
Week 3	Anatomy of male genital system rete testis, seminiferous tubules and vas deference)
Week 4	Anatomy of male genital system (scrotum, spermatic cord and penis)
Week 5	Anatomy of types of penis
Week 6	Anatomy of sex accessory gland of males
Week 7	Anatomy of female genital system (ovary, oviduct)
Week 8	Compare the ovary between females animals
Week 9	Anatomy of female genital system (uterus)
Week 10	Compare the uterus between females animals
Week 11	Anatomy of external organ of female genital system

Week 12	Anatomy of urinary system (kidney and ureter)
Week 13	Anatomy of urinary system (compare between the animal)
Week 14	Anatomy of eyes
Week 15	Anatomy of ear
Week 16	**Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab / introduction of Anatomy of muscles
Week 2	Lab/ muscles of forelimb
Week 3	Lab/ muscles of hind limb
Week 4	Male genital system
Week 5	Compare testes between males of the animals .
Week 6	Composition of the spermatic cord
Week 7	Types of penis
Week 8	Female genital system
Week 9	Ovary and uterus
Week 10	Anatomy of the urinary system
Week 11	Kidney
Week 12	Ureter and urinary bladder
Week 13	eye
Week 14	Muscles of eye
Week 15	ear
Week 16	**Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Bragulla, H., H. E. König and H.-G. Liebich (2007). Veterinary Anatomy of Domestic Mammals Textbook of veterinary anatomy	Yes

Recommended Texts	the anatomy of the domestic animal	yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Poultry Management**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET108**				
ECTS Credits	**5**				
SWL (hr/sem)	**125**				
Module Level	1		**Semester of Delivery**	٢	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Hifa jumaa hassan		**e-mail**	Hifa.hassan@qu.edu.iq	
Module Leader's Acad. Title	professor		**Module Leader's Qualification**	Ph.D	
Module Tutor	AAMER RASSAM ALI		**e-mail**	aamer.ALI@qu.edu.iq	
Peer Reviewer Name	Mohamed Abdel Abbas Malaghi		**e-mail**	Mohamed Malaghi@qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1- Teaching how to deal with poultry . 2- Developing and growing the poultry sector and its importance in improving the health and economic situation
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Teaching how to deal with poultry chickens ,ducks gees 2- Animal treatment, developing and care
Indicative Contents المحتويات الإرشادية	Week 1 Poultry science and industry development - terminology – classification of poultry.2 Week2 Poultry breeding and strains Differences – chromosomal Studies – traits inheritance. Week3 Internal systems of a chicken. Week4 Artificial hatching and hatcheries - egg storage – disinfection and fumigation. Week5 Rearing baby chicks – preparation of houses – hygien measurements required tools. Week 6,7,8,9,10 Factors affecting egg production And feed efficiency indices. Nutrition and rations formulation. Design of poultry houses. Vaccination methods – some Diseases due to faulty management. Week 11,12,13,14,15 Phenotypic parts of chickens Solving problems related to some inherited traits Anatomy of birds Demonstration of hatcheries Demonstration of poultry houses and equipment Solving related problems Calculation of feed Components ratios Studying common management faults and corrections Demonstration of possible cases Possible visit to broiler Slaughtering house or a video show

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Paying attention to the methods of approaching the animal, treating it and cleaning it with extreme caution and knowing the potential risks in order to increase the animal wealth

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Poultry Industry in Iraq and Terminology
Week 2	Poultry Health Management
Week 3	Biology of the chickens
Week 4	Egg structure and Hygiene; Factors affecting egg production
Week 5	Artificial Hatching and Hatcheries
Week 6	Poultry houses Design
Week 7	Nutrition and Rations Formation
Week 8	Chick brooding
Week 9	Management of Breeder, Broiler and Layer chickens
Week 10	Poultry managements in hot climate `
Week 11	Management of Ostrich, turkey, duck and geese
Week 12	Biosecurity in poultry industry
Week 13	Vaccination Management
Week 14	Poultry waste management
Week 15	Introduction to poultry management diseases
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Classification of poultry
Week 2	Lab 2: Phenotypes of poultry
Week 3	Lab 3: Egg Storage – Disinfection and Fumigation
Week 4	Lab 4: Sexing and sex-linked traits
Week 5	Lab 5: Poultry Equipment's
Week 6	Lab 6: Feeding formulation and Calculations of feed components in rations
Week 7	Lab 7: Anatomy of avian digestive system
Week 8	Lab 8: Anatomy of avian respiratory system
Week 9	Lab 9: Anatomy of avian immune system Introduction to immunology
Week 10	Lab 10: Anatomy of avian circulatory system , reproductive system and urinary system
Week 11	Lab 11: Disinfection of poultry Houses and Hatcheries
Week 12	Lab 12: Vaccination programs
Week 13	Lab 13: Lighting and Systems for poultry
Week 14	Lab 14: Ventilation Systems for poultry
Week 15	Lab 15: Visiting of poultry farm
Week 16	Exam

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Poultry Science / Poultry Nutrition and Management	Yes
Recommended Texts	Poultry Health - A Guide for Professionals	yes
Websites	https://www.routledge.com/Animal-Husbandry-Regained-The-Place-of-Farm-Animals-in-Sustainable-Agriculture/Webster/p/book/9781849714211	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**اللغة العربية**			**Module Delivery**	
Module Type	**B**			☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**QU06**				
ECTS Credits	**2**				
SWL (hr/sem)	**50**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Anatomy &histology		**College**	Veterinary medicine	
Module Leader	منى نعمة		**e-mail**	Sameer.abidalredah@qu.edu.iq	
Module Leader's Acad. Title	مدرس		**Module Leader's Qualification**	MSc	
Module Tutor			**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	١. أن ينشأ الطالب على حب اللّغة العربيّة لغة القرآن الكريم. التعرّف على مواطن الجمال في اللّغة العربيّة وآدابها، وأن يكتسب الطالب القدرة على دراسة فروع اللّغة العربيّة. ٢. تعريف الطالب بألفاظ اللّغة العربيّة الصحيحة وتراكيبها وأساليبها السليمة بطريقة مشوقة وجذابة. ٣. أن يستغل الطالب وقت فراغه بالقراءة والإطلاع والرجوع إلى المكتبة . ٤. تمكين الطالب من القراءة الصحيحة، وأن يكتسب القدرة على استعمال اللغة استعمالاً صحيحاً في الاتّصال مع الآخرين؛ كالسرعة وجودة الإلقاء وحسن التعبير، وتعويده حسن الاستماع لما يسمع مما ييسّر له أموره ويعينه على قضاء

	حوائجه. تنمية الذوق الأدبي لدى الطالب حتى يدرك النواحي الجمالية في أساليب الكلام ومعانيه وصوره. ٥. تعويد الطالب التعبيرات السليمة الواضحة عن أفكاره وما يقع تحت حواسه نطقاً وكتابة وحسن استخدام علامات الترقيم. تنمية قدرة ومهارة الطالب الإملائية والخطية بحيث يستطيع الكتابة الصحيحة من جميع النواحي. ٦. إيقاظ وعي الطالب لإدراك شرف الكلمة وتوجيهه؛ للمحافظة على طهارتها ونقائها حتى لا تستعمل إلا في الخير. مساعدة الطالب على فهم التراكيب المعقدة والأساليب الغامضة وتمكين الطالب من التفكير بدقّة والبحث العقلي الدقيق. ٧. العمل على النهوض باللغة العربية والعمل على نشرها قدر المستطاع. تعويد الطلاب على قواعد الحديث واحترام الرأي الآخر وكذلك التغلب على عامل الخجل.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	يتوقع من الطالب بعد انتهائه من متطلبات تخصص (اللغة العربية وآدابها) تحقيق مخرجات التعلم الآتية: مخرجات المعرفة العامة: ١. التعرف إلى مستويات نظام اللغة العربية. ٢. معرفة القواعد النحوية والصرفية. ٣. وصف المناهج النقدية والظواهر الأدبية. ٤. التعريف بأبرز المصنفات اللغوية والأدبية. المهارات الذهنية (الإدراكية): ١. تحديد المشكلات اللغوية والأدبية لدى الدارسين. ٢. القراءة المعاصرة للنصوص اللغوية والأدبية. ٣. تحليل النصوص وشرحها. ٤. الربط بين النص ومحيطه الخارجي. المهارات العملية أو المهنية: ١. قراءة النصوص الأدبية وكتابتها وفق المعايير النحوية والصرفية. ٢. تقطيع الشعر العربي وفقًا للبحور الشعرية في علم العروض. ٣. تدقيق النصوص الأدبية وتصويب الأخطاء الواردة فيها. ٤. الكتابة الإبداعية التي تعبر عن الذات وقضايا المجتمع. ٥. التعبير الشفوي وفن الإلقاء في الميدان المهني والمناسبات العامة. ٦. توظيف أدوات البحث العلمي في كتابة الأبحاث العلمية. ٧. استخدام المعاجم اللغوية.

	مهارات الاتصال، وتقنية المعلومات: ١. الاتصال والتواصل مع الآخرين. ٢. تعزيز المحتوى العربي على الشبكة العنكبوتية. ٣. التعلم الإلكتروني واستخدام الحاسوب في التعليم. ٤. تعزيز الثقة بالنفس والجرأة والفصاحة. ٥. المنافسة والتميز في سوق العمل. الاتجاهات والقيم والبعد الأخلاقي: ١. الالتزام بأخلاقيات المهنة. ٢. المحافظة على القيم الروحية والاجتماعية. ٣. الأمانة والإخلاص في تأدية العمل. ٤. المحافظة على أسرار العمل. ٥. تنمية ثقافة الاستماع وأدب الحوار. ٦. الحفاظ على الهوية القومية والدينية.
Indicative Contents المحتويات الإرشادية	١. ممارسة الكتابة والكلام باللغة العربية الفصيحة. ٢. كتابة المقالات الأدبية بلغة سليمة. ٣. تنويع مصادر التعلم ووسائل التقويم. ٤. مواجهة المشاكل التي تواجهه في مهنته وحلها. ٥. التكيف مع وظائف بديلة عن الوظيفة التي يقتضيها التخصص.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	وهو يقدّم مشورة عملية للمدرّسين وغيرهم من المعلمين الذين يريدون إذكاء الوعي **باللغة العربية** والعمل من أجلها في صفوف تلاميذ مرحلتي التعليم الأساسي والثانوي، بما في ذلك تقديم اقتراحات لاستحداث أنشطة تعلّم في هذا المجال.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	(مقدمة عن اللغة العربية
Week 2	قواعد النحو

Week 3	النكرة والمعرفة
Week 4	اقسام الافعال
Week 5	البناء والاعراب
Week 6	المبتدأ والخبر
Week 7	الفاعل
Week 8	نائب الفاعل
Week 9	الفرق بين الضاد والظاء
Week 10	كتابة التاء المفتوحة والمربوطة
Week 11	قواعد كتابة الهمزة
Week 12	علامات الترقيم
Week 13	نص ادبي
Week 14	نص قراني
Week 15	قواعد كتابة الهمزة
Week 16	**الامتحان**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	لمصادر الحديثة الرئيسية -القرآن الكريم- .شرح ابن عقيل- .الوجيز في اللغة العربية- .قواعد اللغة العربية)النحو والصرف الميسر-)	Yes
Recommended Texts	الوجيز في اللغة العربية لغير المتخصصين.	yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	General Chemistry **الكيمياء العامة**	**Module Delivery**

Module Type	**B**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET105**				
ECTS Credits	**6**				
SWL (hr/sem)	**150**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Physiology and pharm.		**College**	Veterinary medicine	
Module Leader	Jinan Abd-alameer Sabeeh		**e-mail**	Jinan.Sabeeh@qu.edu.iq	
Module Leader's Acad. Title	Prof.		**Module Leader's Qualification**	MSC	
Module Tutor	Dhama Kadim		**e-mail**	Dhama.Kadim@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. We will introduce students to basic laboratory techniques, which include equipment and procedures like heating, evaporation, and weighing. 2. Teaching students about the fundamental aspects of chemistry 3. Promote the success of students in the upper scientific levels of veterinary medicine associated with chemistry by fostering the development of scientific skills. 4. Safety is the primary concern in any laboratory, particularly in chemistry. The student will acquire the ability to implement safe laboratory procedures. 5. Acquaint students with the fundamental principles of organic chemistry
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Acquire knowledge of the basic principles governing atoms and chemical bonding. 2. Gain an understanding of the basic principles of chemical hybridization. 3. The student will be familiar with the fundamental concepts of buffer solutions, acids, and bases. ٤. The student will utilize chemistry's basic principles to effectively prepare and accurately calculate future pharmacological and physiological solutions. ٥. Using titration data to determine the molar concentration of an acid or base solution. ٦. Learn the fundamental principles of analytic chemistry, which is an essential component in veterinary school courses.

	٧. Acquire a comprehensive understanding of the fundamental concepts of organic chemistry, which serve as an important component in veterinary school curricula.
Indicative Contents المحتويات الإرشادية	6. Nuclear Properties: Nuclei's electric charge, atomic, and mass numbers. It also covers isotopes, which are elemental forms with variable neutron counts. Nuclear attributes include quantum numbers, which characterize electron energy and dispersion. It also covers hybridization, which mixes atomic orbitals to generate new hybrid orbitals, and atomic and molecular orbitals, which describe electron probability distributions in atoms and molecules. 7. The fundamental concepts of analytical chemistry include adhering to good laboratory practices and ensuring health and safety. 8. Key Competencies Laboratory skills include liquid handling with pipettes and spectrophotometry. 9. Volumetric analysis: Provide a comprehensive overview of the science of volumetric analysis, including the terminology and classifications used in this field. Review the basic concepts of solute interaction, as well as the volumetric analysis equations and computations. 10. Organic chemistry's cornerstone concepts for computing atomic and electronic structures of molecules, stability, reactivity, and other molecular characteristics 11. The course explores the fundamental concepts and mechanisms behind the reactions of alkenes, alkynes, and aromatic compounds. It also emphasizes the ability to illustrate the mechanics of these reactions. 12. Classes of organic compounds: Enhance the student's understanding of a wider range of organic compounds and enhance their ability to recognize alcohol structures, aldehydes, ketones, carboxylic acids, and amides as chemical entities. 13. Understanding the properties of organic compounds: We will introduce students to the fundamental principles of organic chemistry by focusing on the molecular structures, properties, and chemical reactivity of a variety of compounds, including alcohol, aldehydes, ketones, carboxylic acids, and amides. 14. Classify several organic reactions, such as substitution, elimination, and addition, and illustrate the process of breaking and forming chemical bonds. 15. Writing abilities—enhancing students' capacity to write scientific reports to aid them in their pursuit of advanced veterinary degrees.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Conducting captivating chemical experiments to engage students 2. Establish a connection between chemistry and daily life.

	3. Motivate students to be passionate about their chemistry abilities. Students are more likely to be enthusiastic about potential career paths, as many consider them at the university level. 4. To facilitate comprehension, we emphasize functional categories. One of the most critical components of organic molecules is their functional group. The functional groups are the reactive components of the molecules, which are the pieces that change chemical reactions. This requires significant emphasis. For instance, students must see how an alcohol's carbon chain connects to an O and then an H. 5. Asking intriguing questions at the beginning of a general chemistry lecture stimulates students' curiosity and enthusiasm for chemistry.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**Atom and Types of bonds**
Week 2	**Preparation of solutions, molarity and molality**
Week 3	**Aldehydes and ketones, Alcohols, carboxylic acids, amines and amides**
Week 4	**Classification and Functions of Carbohydrates**
Week 5	**Monosaccharides and Disaccharides**
Week 6	**Derivatives of Monosaccharides**
Week 7	**Polysaccharides**
Week 8	**Classification and Functions of Lipids**
Week 9	**Fatty Acids**
Week 10	**Lipoproteins**
Week 11	**General Nature of Amino Acids and Classification of Amino Acids**
Week 12	**Modified or Nonstandard Amino Acids**
Week 13	**Properties of Amino Acids and Biologically Important Peptides**
Week 14	**Definition, Classification of Proteins**
Week 15	**Functions and properties of proteins**
Week 16	**Preparatory week before the final Exam**
Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	**General Instruction**

Week 2	**Preparation of solutions : solid substances**
Week 3	**Preparation of solutions : liquid substances**
Week 4	**Saponification**
Week 5	**Preparation of aspirin**
Week 6	**Qualitative analysis of carbohydrates: general test of carbohydrates**
Week 7	**Reducing properties of sugars**
Week 8	**Polysaccharide tests**
Week 9	**Qualitative analysis of proteins**
Week 10	**Specific color reactions of amino acids**
Week 11	**Emulsification**
Week 12	**Qualitative analysis of lipids**
Week 13	**Tests for fatty acids**
Week 14	**Tests for cholesterol**
Week 15	**Acid number**
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	**General, Organic, and Biochemistry. 9th Edition (2022) Katherine Denniston et al., McGraw Hill / Medical Publisher.**	**Yes**
	Biochemistry by Pankaja Naik (Author), 6th edition (2022), Jaypee Brothers Medical Publishers Pvt Ltd.	**Yes**
Recommended Texts	**Harper's Illustrated Biochemistry, 32nd Edition (2023)** **by Peter J. Kennelly (Author), Kathleen M. Botham (Author), Owen McGuinness (Author). McGraw Hill / Medical Publisher.**	**Yes**
Websites	**https://themedicalbiochemistrypage.org/**	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Animal Husbandry**			**Module Delivery**	
Module Type	**C**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**VET 107**				
ECTS Credits	5				
SWL (hr/sem)	١٢٥				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Kadhem Hassan abbas		**e-mail**	Kadhem abbas@qu.edu.iq	
Module Leader's Acad. Title	Assist professor		**Module Leader's Qualification**	Master	
Module Tutor	Mohammed Mahdi Yassin		**e-mail**	Mohammed Yassin@qu.edu.iq	
Peer Reviewer Name	Mohamed Abdel Abbas Malaghi		**e-mail**	Mohamed Malaghi@qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	4. Developing and understanding the principles of field Pet Animal Care from a veterinary perspective in a way that supports the practical side of the profession 5. The ability to manage the Pet Animal Care field in the healthiest ways 6. Ability to deal with different Pet Animal.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	4. Explanation of scientific subjects through theoretical lectures. 5. Applications of pet animal care in laboratories. **6.** Student prepare a scientific related reports with pet animal care
Indicative Contents المحتويات الإرشادية	This course provides an English language tool for assessing animal behavior in interaction with humans and pets. The psychological and behavioral characteristics of various types of pets are presented. The course will include the advantages of raising

	pets, principles of health management, diseases that may affect them, and diseases that may be transmitted to humans, as it will address aspects of their causes and prevention. In this course, students will be taught the importance and benefits of raising pets [SSWL= 6 hours]. Also, how to deal with animals and ways to restrain, restrain and control them, along with the methods and means that help in their reproduction. We will focus in these aspects on cats and dogs [SSWL= 6 hours] As for the other aspect, it will address the methods of feeding them (dogs, cats and birds), housing them and estimating their ages [SSWL= 6 hours] Students will also be taught the best methods of vaccination [SSWL= 2 hours] Knowing the behaviors and methods of communicating with pets of all kinds [SSWL= 2 hours] The course will also address the management aspects of some laboratory animals such as guinea pigs and rabbits [SSWL= 6 hours] Finally, general care methods for pet birds [SSWL= 5 hours]. Total hrs = 30 = (Time table 2 hr x 15 weeks)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, dealing with different pet animal to deal with it the basic rules for their health care and management, As well as using devices and tools that assist in controlling animals. This will be achieved through classroom and lessons that will help students understand and apply it in the labor market.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**History and Breeds**
Week 2	**Animal health of pet animal**
Week 3	**Animal health of pet birds**
Week 4	**Animal Handling and methods of restrain**
Week 5	**Management of Reproduction in Dogs**
Week 6	**Management of Reproduction in Cats**
Week 7	**Pet feeding**
Week 8	**Pet bird feeding**
Week 9	**Housing**
Week 10	**Age estimation**

Week 11	**Vaccination**
Week 12	**Pet Communication and Behavior**
Week 13	**Guinea pig management**
Week 14	**Rabbits pet animals**
Week 15	**Pet bird general care**
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources **مصادر التعلم والتدريس**		
	Text	**Available in the Library?**
Required Texts	Small Animal Care and Management 4th Edition	Yes
Recommended Texts	Veterinary Guide for Animal Owners: Caring for Cats, Dogs, Chickens, Sheep, Cattle, Rabbits and More, 2nd Edition	yes
Websites	https://www.audible.com/cat/Home-Garden/Pets-Animal-Care-Audiobooks/18573724011	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية				
Module Title	**Computer**		**Module Delivery**	
Module Type	**B**		☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**QU04**			
ECTS Credits	**3**			
SWL (hr/sem)	**75**			
Module Level	1	**Semester of Delivery**	2	
Administering Department	Public health	**College**	Veterinary medicine	

Module Leader	Salman hamza Hussein	**e-mail**	Salman.Hussein @qu.edu.iq
Module Leader's Acad. Title	Assist professor	**Module Leader's Qualification**	Ph.D
Module Tutor		**e-mail**	
Peer Reviewer Name		**e-mail**	
Scientific Committee Approval Date	11/8/2024	**Version Number**	1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	3- Teaching computer science and keeping up with the latest developments in computer science 4- Teaching computer maintenance methods.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	3- Preparing students who have the ability to work on the computer 4- Enabling students to learn about different computer programs
Indicative Contents المحتويات الإرشادية	Theoretical Week 1 Week2 Computer Lab. Visit – demonstration of computer parts Week3,4,5 Computer science terminology – GWBASIC programming Week 4,5,6,7,8 Operating systems (MS-DOS and WINDOWS) Week 9,10,11,12,13,14,15 Microsoft office programs (Word, PowerPoint, and Excel). Practical Computer Lab. Visit – demonstration of computer parts **10** Computer science terminology – GWBASIC programming **10** Operating systems (MS-DOS and WINDOWS) **20** Microsoft office programs (Word, PowerPoint, and Excel).

Learning and Teaching Strategies استراتيجيات التعلم والتعليم

Strategies	Qualifying students to learn various Microsoft programs and the ability to work on the computer

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Computer Lab. Visit – demonstration of computer parts
Week 2	Computer Lab. Visit – demonstration of computer parts
Week 3	Computer science terminology – GWBASIC programming
Week 4	Computer science terminology – GWBASIC programming
Week 5	Computer science terminology – GWBASIC programming
Week 6	Computer science terminology – GWBASIC programming
Week 7	Operating systems (MS-DOS and WINDOWS)
Week 8	Operating systems (MS-DOS and WINDOWS)
Week 9	Operating systems (MS-DOS and WINDOWS)
Week 10	Operating systems (MS-DOS and WINDOWS)
Week 11	Operating systems (MS-DOS and WINDOWS)
Week 12	Microsoft office programs (Word, PowerPoint, and Excel).
Week 13	Microsoft office programs (Word, PowerPoint, and Excel).
Week 14	Microsoft office programs (Word, PowerPoint, and Excel).
Week 15	Microsoft office programs (Word, PowerPoint, and Excel).
Week 16	**Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Computer Lab. Visit – demonstration of computer parts
Week 2	Computer Lab. Visit – demonstration of computer parts
Week 3	Computer Lab. Visit – demonstration of computer parts
Week 4	Computer science terminology
Week 5	Computer science terminology – GWBASIC programming
Week 6	Operating systems MS-DOS

Week 7	Microsoft office programs
Week 8	Word
Week 9	PowerPoint
Week 10	Excel
Week 11	GWBASIC programming
Week 12	Computer science terminology – GWBASIC programming
Week 13	WINDOWS
Week 14	Access
Week 15	Access
Week 16	**Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	The Computer Science Book: A complete introduction to computer science in one book Kindle Edition by Thomas Johnson	No
Recommended Texts		
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Computer**			**Module Delivery**	
Module Type	**B**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code					
ECTS Credits	**3**				
SWL (hr/sem)	**75**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Salman hamza Hussein		**e-mail**	Salman.Hussein @qu.edu.iq	
Module Leader's Acad. Title	Assist professor		**Module Leader's Qualification**	Ph.D	
Module Tutor	Ban Abdul Kadhim Abdul Ali		**e-mail**	Ban.Abdul Ali @qu.edu.iq	
Peer Reviewer Name	Alia Hussein Mohammed Ali		**e-mail**	Alia.Mohammed @qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1- Teaching computer science and keeping up with the latest developments in computer science 2- Teaching computer maintenance methods.

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Preparing students who have the ability to work on the computer 2- Enabling students to learn about different computer programs
Indicative Contents المحتويات الإرشادية	أولاً: الشبكات ((Computer Networks ١. مقدمة في الشبكات • تعريف الشبكة الحاسوبية • أهمية الشبكات في الحياة اليومية والعمل • تصنيفات الشبكات ((LAN, WAN, MAN, PAN ٢. مكونات الشبكة ٣. التطبيقات العملية. ثانياً: الذكاء الاصطناعي ((Artificial Intelligence ١. مقدمة في الذكاء الاصطناعي • تعريف الذكاء الاصطناعي • الفرق بين الذكاء الاصطناعي والذكاء البشري • مجالات تطبيقه ٣. تقنيات الذكاء الاصطناعي ٤. تطبيقات الذكاء الاصطناعي ٥. التحديات والأخلاقيات

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Qualifying students to learn various Microsoft programs and the ability to work on the computer

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	**Security and networking:** What is a network? Types of networks.
Week 2	**Security and networking:** Basic network components. Network Security Basics.

Week 3	**Security and networking:** Understanding network threats. Network Troubleshooting.
Week 4	**E-Commerce:** Concepts of Electronic banking: ATM and debit card services, Phone banking.
Week 5	**E-Commerce:** Concepts of Electronic banking: SMS banking, electronic alert, Mobile banking.
Week 6	**Computer Troubleshooting:** Identifying and solving common hardware and software problems that computer users encounter.
Week 7	**Computer Troubleshooting:** Basic troubleshooting techniques and tools for diagnosing and resolving issues.
Week 8	**Introduction to AI:** Definition of AI. History of AI.
Week 9	**Introduction to AI:** AI Techniques and Approaches, Challenges and Ethical Considerations.
Week 10	**AI in our Dailey Lives:** AI in smartphones and virtual assistants like Siri or Google Assistant.
Week 11	**Applications of AI:** Education, healthcare and Finance.
Week 12	**Applications of AI:** Transportation, Marketing and Advertising.
Week 13	**AI and Society:** (How AI affects social, AI and international relations, AI and the future of humanity).
Week 14	**Ethical challenges in AI:** (AI ethics, privacy and surveillance, the impact of AI on the job market).
Week 15	**The future of AI:** (Future trends in AI, recent research and emerging technologies).
Week 16	**Exam**

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي العملي

	Material Covered
Week 1	**Security and networking:** What is a network? Types of networks.
Week 2	**Security and networking:** Basic network components. Network Security Basics.
Week 3	**Security and networking:** Understanding network threats. Network Troubleshooting.
Week 4	**E-Commerce:** Concepts of Electronic banking: ATM and debit card services, Phone banking.
Week 5	**E-Commerce:** Concepts of Electronic banking: SMS banking, electronic alert, Mobile banking.
Week 6	**Computer Troubleshooting:** Identifying and solving common hardware and software problems that computer users encounter.
Week 7	**Computer Troubleshooting:** Basic troubleshooting techniques and tools for diagnosing and resolving issues.
Week 8	**Introduction to AI:** Definition of AI. History of AI.
Week 9	**Introduction to AI:** AI Techniques and Approaches, Challenges and Ethical Considerations.

Week 10	**AI in our Dailey Lives:** AI in smartphones and virtual assistants like Siri or Google Assistant.
Week 11	**Applications of AI:** Education, healthcare and Finance.
Week 12	**Applications of AI:** Transportation, Marketing and Advertising.
Week 13	**AI and Society:** (How AI affects social, AI and international relations, AI and the future of humanity).
Week 14	**Ethical challenges in AI:** (AI ethics, privacy and surveillance, the impact of AI on the job market).
Week 15	**The future of AI:** (Future trends in AI, recent research and emerging technologies).
Week 16	**Exam**

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	اساسيات الحاسوب ، ٢٠١٦. الخضر علي الخضر	
Recommended Texts	مدخل الى عالم الذكاء الاصطناعي ، ٢٠٠٥. الدكتور عادل عبد النور	
Websites	----------	

Module Information
معلومات المادة الدراسية

Module Title	Basic Biochemistry	**Module Delivery**	
Module Type	C	☒**Theory** ☒**Lecture** ☒**Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	VET204		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	2	**Semester of Delivery**	1
Administering Department	Physiology and pharm.	**College**	Veterinary medicine
Module Leader	Miaad Jabbar Sahib	**e-mail**	miaad.Sahib@qu.edu.iq
Module Leader's Acad. Title	Assist. Prof.	**Module Leader's Qualification**	PhD
Module Tutor	Dhama Kadim	**e-mail**	Dhama.Kadim@qu.edu.iq
Peer Reviewer Name		**e-mail**	

Scientific Committee Approval Date	8/8/2024	**Version Number**	1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. We will introduce students to basic laboratory techniques for determination of different body fluids and blood chemical components. 2. Teaching students about the fundamental aspects of biochemistry. 3. Promote the success of students in the upper scientific levels of veterinary medicine associated with chemistry by fostering the development of scientific skills. 4. Safety is the primary concern in any laboratory, particularly in chemistry. The student will acquire the ability to implement safe laboratory procedures. 5. Identify energy rich dietary constituents, cellular sites of energy generation. 6. Understand mechanism of cellular ATP formation and utilization. 7. Understand ways of regulation of cellular energy metabolism. 8. Understand the mechanism and effect of poisons on cellular energy. generation.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Acquire knowledge of the basic principles about biomolecules, in addition to learn their biochemical importance according to their chemical structure. 2. Gain an understanding of the basic principles of energy synthesis and the major bioenergetics.

	3. The student will be familiar with the fundamental concepts of glucose metabolism to produce energy in aerobic and an aerobic conditions, and to learn the most important glucose transporters at the cellular levels and which of these receptors is insulin dependent glucose uptake . ٤.Learn the fundamental principles of analytic chemistry, which is an essential component in veterinary school courses. 5. Acquire a comprehensive understanding of the fundamental concepts of amino acids and proteins, which serve as an important source for energy and their relation to nitrogen balance.
Indicative Contents المحتويات الإرشادية	1. Understanding the properties of biomolecules: We will introduce students to the fundamental principles of different component of the body according to their chemistry by focusing on the molecular structures, properties, and chemical reactivity of a variety of compounds, including: carbohydrates, proteins, lipids and nucleic acids. 2. The fundamental concepts of energy production inside the body and the major bioenergetics, in addition to learn how to calculate the amount of energy as ATP. 3. Key Competencies laboratory skills include liquid handling and using of spectrophotometer. 4. The course explores the fundamental concepts and mechanisms behind the role of enzymes in acceleration of chemical reactions. It also emphasizes the ability to illustrate the mechanics of these reactions. 5.Identify the main actions of hormones: Enhance the student's understanding of a wider range of pharmacological uses of these hormones, especially in treatment of hormonal disturbances cases. 6. Writing abilities—enhancing students' capacity to write scientific reports to aid them in their pursuit of advanced veterinary degrees.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Conducting captivating chemical experiments to engage students 2. Establish a connection between biochemistry and daily life. 3. Motivate students to be passionate about their biochemistry abilities. Students are more likely to be enthusiastic about potential career paths, as many consider them at the university level. 4. Asking intriguing questions at the beginning of a general biochemistry lecture stimulates students' curiosity and enthusiasm for biochemistry.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Cell biochemistry: Introduction, objectives of biochemistry, biomolecules, water.
Week 2	Cell biochemistry: Subcellular organelles and their biochemical importance.
Week 3	Carbohydrate Metabolism: Chemistry of carbohydrates, function of carbohydrates.
Week 4	Carbohydrate Metabolism : Digestion and absorption of carbohydrates.
Week 5	Carbohydrate Metabolism : Aerobic glycolysis, an aerobic glycolysis, fermentation.
Week 6	Carbohydrate Metabolism: Gluconeogenesis, Pentose phosphate pathway.
Week 7	Carbohydrate Metabolism: Glycogen metabolism, glycogenolysis, glycogenesis.
Week 8	Hormones: Introduction, mechanism of action of hormones.
Week 9	Hormones: Signal transduction of hormones.

Week 10	Integrative metabolism bioenergetics: Introduction , Formation and utilization of ATP, Kreb's cycle, Function and regulation of kreb's cycle.
Week 11	Integrative Metabolism Bioenergetics: Electron transport system and oxidative phosphorylation.
Week 12	Amino acids and Proteins: Classification of amino acids , properties of amino acids, proteins, classifications of proteins , structures of proteins.
Week 13	Amino acids and Proteins: Denaturaion of proteins , Digestion and absorption of proteins . Amino acid catabolism , Nitrogen balance, excretion and the urea cycle.
Week 14	Enzymes: Principles and classifications of enzymes , mechanism action of enzymes.
Week 15	Enzymes: Enzyme Inhibition, regulation of enzyme activity.

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	General instruction of laboratory equipment.
Week 2	Carbohydrates test
Week 3	General qualitative test
Week 4	Unknown of carbohydrates
Week 5	glycogens
Week 6	Proteins : Fibrous proteins
Week 7	Separation of albumin and globin by precipitation
Week 8	Glycoprotein
Week 9	Phosphoprotein : Enzymes
Week 10	Amylolytic activity of amylase
Week 11	Effect of pH on amylase activity.
Week 12	Effect of temperature on amylase activity
Week 13	Urine: Physical properties of urine
Week 14	Normal and abnormal constituents of urine

Week 15	Unknown of urine

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Vasudevan D.M. et al. (2023). Textbook of biochemistry for medical students. 10th edition. Jaypee brothers medical publishers (P) LTD.	yes
Recommended Texts	Murray, R. K. et al. (2015). Harpers illustrated biochemistry.. McGraw Hill Lange.	yes
Websites	https://awesomechem.wordpress.com/wp-content/uploads/2016/10/harpers-illustrated-biochemistry-28th-ed-robert-k-murray-et-al-mcgraw-hill-2009.pdf	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Visceral Anatomy			**Module Delivery**	
Module Type	core			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET201				
ECTS Credits	5				
SWL (hr/sem)	78				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Anatomy &histology		**College**	Veterinary medicine	
Module Leader	Fatimah swadi		**e-mail**	fatimah.zghair@qu.edu.iq	

Module Leader's Acad. Title	Assit.professor	**Module Leader's Qualification**	PHD
Module Tutor	Maha abd al hadi &Saffia Karim	**e-mail**	Maha.alabdula@qu.edu.iq Saffia.alumare@qu.edu.iq
Peer Reviewer Name	Raad kahat	**e-mail**	Raaded123@gmail.com
Scientific Committee Approval Date	1/6/2025	**Version Number**	1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	The general objective of teaching basic sciences in the anatomy department is to provide important scientific knowledge that includes knowledge of the structural composition of the body at the level of systems, organs and cells. Knowledge of scientific methods for studying anatomy and modern molecular methods. Raising the ability of students to link anatomical facts with clinical applications using radiography, ultrasound, magnetic resonance imaging and histological slides. Applying professional and ethical education for students to deal with animal cadavers.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Knowledge A-1 The student knows the basic methods of studying veterinary anatomy. A-2 Enabling the student to explain and describe the body organs using modern methods. A-3 Enabling the student to apply the tissue sectioning technique and the tissue immunology technique. A-4 The student analyzes the main structures that make up the body systems, especially the systems that affect animal productivity. A-5 The student can express his opinion on the quality of animals in private fields and farms. A-6 The student can plan various animal production projects. B- Skill B1 - The student acquires anatomy skills. B2 - The student acquires the skills of analyzing and comparing the

	structures of different animal bodies. B3 - The student acquires the necessary skills to select good qualities for farm animals C- Values: C-1 The learner provides assistance to his friends in the class and group work C-2 The learner practices volunteer work with full awareness and understanding C-3 The student tries to maintain mutual respect between him and his classmates in the class, as well as mutual respect with the educational family in the college C-4 The student can become familiar with the ethics of the profession and the relationship with the breeders, and the motivation is moral and emotional.
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be followed in delivering this unit is to stimulate students' participation in dissection, while at the same time developing and enriching their skills in handling dissection instruments. This will be done through classroom, interactive lessons, as well as by conducting simple experiments that include sampling activities that interest students.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	DIGESTIVE SYSTEM General description of the digestive system and its embryological development.
Week 2	Mouth cavity and its content like the tongue and hard palate and soft palate with its muscles and cheeks and lips
Week 3	blood and nerve supply of the tongue
Week 4	Salivary glands, pharynx and its layers and muscles and openings.
Week 5	The hyoid apparatus (bones and muscles). Muscles of mastication
Week 6	Course and relationship of esophagus and its structures. Classification of stomach,
Week 7	parts of the intestine, duodenum, jejunum, ileum
Week 8	The caecum and its variations in farm animals. Colon and its variations in farm animals, rectum, anus

Week 9	Accessory glands like the liver and its ligaments and lobation, gallbladder and the variations in farm animals. Pancreas and its variations. Peritoneum its reflexation in the abdominal cavity to fix the abdominal organs
Week 10	RESPIRATORY SYSTEM Introduction
Week 11	nose, nasal cavity, nasopharynx
Week 12	paranasal sinuses
Week 13	larynx, trachea
Week 14	, lungs
Week 15	thoracic cavity, pleura.
Week 16	**exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	General description of the skull.
Week 2	Cranial cavity, nasal cavity, hyoid bone, mandible
Week 3	Skull comparative, paranasal sinuses.
Week 4	Cervical vertebrae comparative.
Week 5	Superficial dissection of face region (muscles, nerves, arteries, veins).
Week 6	Deep dissection of face region (muscles, nerves, arteries, veins, parotido auricular region, buccal region, mental region).
Week 7	Dissection of oral cavity with its contents (compassion), muscles of hyoid bone, muscles and papillae of tongue
Week 8	Dissection of pharynx (divisions, muscles, openings, muscles of soft palate, muscles of mastication)
Week 9	Dissection of nasal cavity with its contents (comparison), larynx (laryngeal cartilages, laryngeal cavities, laryngeal muscles), blood and nerve supply to the larynx
Week 10	Stomach in different animal
Week 11	Small and large intestine
Week 12	cranium
Week 13	nose, nasal cavity, nasopharynx paranasal sinuses
Week 14	larynx, trachea

	, lungs
Week 15	thoracic cavity, pleura.
Week 16	exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Bragulla, H., H. E. König and H.-G. Liebich (2007). Veterinary Anatomy of Domestic Mammals Textbook of veterinary anatomy	Yes
Recommended Texts	the anatomy of the domestic animal	yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية				
Module Title	جرائم نضام البعث في العراق		**Module Delivery**	
Module Type			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	Qu08			
ECTS Credits	2			
SWL (hr/sem)	33			
Module Level	1		**Semester of Delivery**	1
Administering Department	Anatomy &histology		**College**	Veterinary medicine
Module Leader	محمد عبد جري		**e-mail**	Mohamd.jree@qu.edu.iq
	استاذ مساعد		**Module Leader's Qualification**	PHD
Module Tutor			**e-mail**	

Peer Reviewer Name		**e-mail**	
Scientific Committee Approval Date	1/6/2025	**Version Number**	1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	١- تمكين الطالب من التعرف على القوانين المحلية والدولية وخصوصا التي تتعامل مع قضايا حقوق الانسان والانتهاكات المرتكبة ضدها، ورفع مستوى الثقافة القانونية لديه التي تجعله يتبناها لرفض تلك الانتهاكات سواء داخل نظام الدولة الذي ينتمي إليه أو خارجه. ٢-تمكين الطالب من التعرف على انواع الجرائم التي ترتكب داخل الدولة والتمييز ما بينها وبين الجرائم ضد الإنسانية من خلال التعرف على صفاتها واسسها والقوانين التي تنطبق عليهم ٣- لتعريف قوانين المحكمة الجنائية الدولية ضد الإنسانية، وقوانين المحكمة الجنائية العراقية العليا عام ٢٠٠٥، الموثقة الانتهاكات نظام حزب البعث للإنسانية خلال فترة الحكم.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	أ-الاهداف المعرفية الشرح • العصف الذهني • الحوار والنقاش • اختبار سريع
Indicative Contents المحتويات الإرشادية	ب- الأهداف المهاراتية الخاصة بالمقرر

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	ان الجرائم الشنيعة التي اقترفها نظام البعث في العراق لا تكاد تحصى كثرة ولو ان اقلام الباحثين تعقبتها سنوات طويلة بالتوثيق والتحليل والدراسة لما أتتِ على حقيقة ما جرى في بلدنا الجريح من مآسٍ وويلاتُ ونكبات قام بها نظام البعث الجائر؛ لأنهاَّاتسعت لتشمل مفاصل الحياة كافة فطالتَ الحجرَ والمدر والبشر،ُ وستبقى هذه الجرائم وصمة عارُ وعلامةُخزي في جبين مرتكبيها مابقى الدهر تلاحقهم دماء الأبرياء،ُ وآلام الضحايا، ولعنة الأهوار التي حرموها من مائها على مضض، وانكسار الجبال التي جردوها من شموخها بقسوة، وأنين النخيل والبساتين، حين أطفأ خضرتهاُ وتقض مضاجعهم دموع الأرامل والأيتام،ُ وصرخاتُ المعذبين، وأطيافً الأطفال الذين ماتوا جوعا في ربوع بلد الرافدين حتى تشخص جرائمهم هذه دليل ادانة في محكمة العدل الإلهية يوم القيامة عندماُتظهر كتبهم كل صغيرة وكبيرة منها تسوقهم إلى جهنم زمراً.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	تعريف مفهوم علم الجرائم
Week 2	انتهاكات الحقوق والحريات
Week 3	نبذه وصفية عن الأنظمة السياسية في العراق
Week 4	انتهاكات النظام البعثي للحقوق والحريات العامة
Week 5	اثر سلوكيات نظام البعث على المجتمع
Week 6	اثر المرحلة الانتقاليه في محاربة الفساد
Week 7	الميدان النفسي والميدان الاجتماعي والثقافة والاعلام وعسكرة المجتمع
Week 8	اثر القمع والحروب على المجتمع
Week 9	استعمال الأسلحة المحرمة دوليا والتلوث البيئي
Week 10	سياسة الأرض المحروقة
Week 11	تجفيف الاهوار والهجرة القسرية
Week 12	تدمير البيئة الزراعية والحيوانية
Week 13	المقابر الجماعية وقصف دور العبادة
Week 14	اثر سلوكيات النظام البعثي وتسلطه على المجتمع
Week 15	الامتحان
Week 16	المراجعة

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	كتاب: جرائم نظام البعث في العراق،)العراق، وزارة التعليم العالي والبحث العلمي، ٢٠٢٣ •)د. غسان كريم المجذاب وأمجد زين العابدين طعمة، حقوق االنسان والديمقراطية، ٢٠١٨. •زوينة الوليد، جريمة االبادة الجماعية على ضوء االجتهاد القضائي للمحكمة الجنائية الدولية لرواندا ، رسالة ماجستير غير منشورة،)جامعة الجزائر، كلية الحقوق، بن عكنون، ٢٠١٣ • .)دستور العراق لعام.	Yes
Recommended Texts	United Nations Universal Declaration of Human Rights 1948, • https://www.supremecourt.geقانون المحكمة الجنائية العراقية العليا	yes

	رقم)١٠(لسنة ٢٠٠٥، https://menarights.org/sites/default/files/2016-11/IRQ_Supreme%20Criminal%20Court%20Act_2005_AR_0.pdf • تقرير: تشريع منظمة االمم المتحدة في فصلها الرابع/ الجرائم ضد االنسانية، ٢٠١٧، https://legal.un.org/ilc/reports/2017/arabic/chp4.pdf	
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Animal Nutrition**			**Module Delivery**	
Module Type				☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code					
ECTS Credits					
SWL (hr/sem)					
Module Level	٢		**Semester of Delivery**	2	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Zahira.Abduljabbar Abdulameer		**e-mail**	Zahira.Abduljabbar@qu.edu.iq	
Module Leader's Acad. Title	Assist professor		**Module Leader's Qualification**	Master	
Module Tutor	Esraa Tahir Muslim		**e-mail**	esraa.tahir@qu.edu.iq	
Peer Reviewer Name	Shaimaa Abass Sabeh		**e-mail**	Shaimaa.sabeh@qu.edu.iq	
Scientific Committee Approval Date	11/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	To develop an understanding of the principle of nutrition and their application to meeting the nutrient requirements of livestock and other animal species.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- To develop an understanding of the principle of nutrition and their application to meeting the nutrient requirements of livestock and other animal species. 2- To understand how can prepare balance feed stuff of animals and know the nutritional disorder.
Indicative Contents المحتويات الإرشادية	1 week Orientation and general information Development of nutritional science, Animal nutrition: It's Role in Modern Agriculture and society, Definition of terms, Composition of animal feed, Composition of the Animal body. 2 week Water and its function Properties and function of water, Absorption, distribution and turnover of water, Sources of water supply, Sources of water loss, Water requirement, Water restriction, Water Quality, Water regulation. 3 week Carbohydrate metabolism Chemical forms and dietary sources, carbohydrate metabolism, Importance of glucose, Sources of blood glucose, Glycogen breakdown, Glucose anabolism, Glucose Utilization 4 week Lipid and volatile fatty acid Classification of lipid, Structures and function of lipid, Lipid Anabolism, Lipid synthesis (lipogenesis), Lipid catabolism. Sources of Volatile fatty acids, Ruminal production and absorption, Postabsorptive Metabolism, Post-hepatic tissues metabolism, metabolism In ruminant tissue

	5 week Proteins and nucleic acid metabolism Biological Functions and Properties, Composition and Structure, Structural classification, General properties of amino acids, Essential and nonessential amino acids, amino acid composition and protein quality, protein metabolism, Protein synthesis, Protein synthesis versus degradation animal responses to protein nutrition, Practical considerations. 6 ,7 week Energy metabolism Energy terminology, Methods of measuring heat production, important concept in energy metabolism, Efficiency of energy utilization 8 week Vitamins Functions and Properties, Composition and Structure, Structural classification, General properties important and deficiency. 9 week minerals Functions and Properties, Composition and Structure, Structural classification, General properties important and deficiency. 10 week Evaluation of feed stuff prameters : digestibility ,energy partition ,protein tests 11 week Nutritional requirements of farm animals(maintenance and productional requirements) 12 week Nutritional requirements of poultry maintenance and productional requirements) 13 week Poultry nutrition in hot weather 14 week Nutritional disorder 15 week Feed additives

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	he study of learning and teaching strategies in animal nutrition is a fascinating area of research that has provided valuable insights into how animals acquire, process, and transmit information related to their feeding behaviors and dietary needs.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Orientation and general information Development of nutritional science, Animal nutrition: It's Role in Modern Agriculture and society, Definition of terms, Composition of animal feed, Composition of the Animal body.
Week 2	Water and its function Properties and function of water, Absorption, distribution and turnover of water, Sources of water supply, Sources of water loss, Water requirement, Water restriction, Water Quality, Water regulation.
Week 3	Carbohydrate metabolism Chemical forms and dietary sources, carbohydrate metabolism, Importance of glucose, Sources of blood glucose, Glycogen breakdown, Glucose anabolism, Glucose Utilization
Week 4	Lipid and volatile fatty acid Classification of lipid, Structures and function of lipid, Lipid Anabolism, Lipid synthesis (lipogenesis), Lipid catabolism.

	Sources of Volatile fatty acids, Ruminal production and absorption, Post absorptive Metabolism, Post-hepatic tissues metabolism, metabolism In ruminant tissue.
Week 5	5 week Proteins and nucleic acid metabolism Biological Functions and Properties, Composition and Structure, Structural classification, General properties of amino acids, Essential and nonessential amino acids, amino acid composition and protein quality, protein metabolism, Protein synthesis, Protein synthesis versus degradation animal responses to protein nutrition, Practical considerations.
Week 6	Energy metabolism Energy terminology, Methods of measuring heat production, important concept in energy metabolism, Efficiency of energy utilization.
Week 7	Energy metabolism Energy terminology, Methods of measuring heat production, important concept in energy metabolism, Efficiency of energy utilization
Week 8	Vitamins Functions and Properties, Composition and Structure, Structural classification, General properties important and deficiency
Week 9	minerals Functions and Properties, Composition and Structure, Structural classification, General properties important and deficiency
Week 10	Evaluation of feed stuff prameters : digestibility ,energy partition ,protein tests
Week 11	Bedding (litter) and its importance for farm animals. ▪ Behavior of farm animals.
Week 12	Nutritional requirements of farm animals(maintenance and productional requirements
Week 13	Poultry nutrition in hot weather
Week 14	Nutritional disorder
Week 15	Feed additives

Week 16	Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Using the nutrition laboratory
Week 2	Feedstuff approximate analysis
Week 3	How take sample for analysis
Week 4	Moisture determination in feedstuff green roughage,, milk, meat and egg
Week 5	determination of ash
Week 6	determination of silo
Week 7	Preparing standard solution
Week 8	determination of crude protein
Week 9	determination of crude fiber
Week 10	determination of ether extract
Week 11	determination of NFE BY calculated method
Week 12	determination of gross energy by calculated method
Week 13	Determination of energy by bomb calorimetry
Week 14	Digestive trials
Week 15	Making standard ration for farm animals
Week 16	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**

Required Texts	- Animal nutrition/ 2002by Peter McDonald and Richard Alan Edwards 2- Basic Animal nutrition and feeding/1998-2005 by Wilson G. Pond and David B. Church	Yes
Recommended Texts		
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Basic histology			**Module Delivery**	
Module Type	core			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET202				
ECTS Credits	٤				
SWL (hr/sem)	٦٣				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Anatomy &histology		**College**	Veterinary medicine	
Module Leader	Nabeel Abid Murad almammorri		**e-mail**	nabeel.almammori@qu.edu.iq	
Module Leader's Acad. Title	Assit.professor		**Module Leader's Qualification**	PHD	
Module Tutor	Eman fasial &Hazem Karim		**e-mail**	Eman.fasial@qu.edu.iq Hazem.almhanna@qu.edu.iq	
Peer Reviewer Name	Eman ibrahim		**e-mail**	Eman.alhacham@qu.edu.iq	

Scientific Committee Approval Date	1/6/2025	**Version Number**	1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Identify the tissue structure of different body parts in general and in different animals. -2. Make a comparison of the tissue structure of all body parts between different animals and humans. -3. Introduce the student to the different parts of the microscope and teach him how to use it. -4. The student learns how to examine different tissue sections and differentiate them from each other. -5. Develop the student's ability to diagnose normal tissue sections in order to differentiate them in the next stage from pathological tissue sections. -6. Study the types of blood cells as one of the types of connective tissues to benefit from them in knowing the natural components of blood. -7. Teach the student how to take samples of body parts and treat them histologically and make tissue sections.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Cognitive objectives A-1 The student will learn about the tissue structure of the different organs of the body. A-2 The student will learn about the tissue structure of the organs of the body in different types of animals. A-3 The student will learn about the natural structure of each organ of the body. A-4 The student will learn how to differentiate each organ from other organs in the body. A-5 The student will learn how to take samples and treat them histologically. A-6 The student will learn how to make tissue sections. B- Course skill objectives. B1 - Preparing the student properly to have a solid foundation in the specialization of histology, which is considered the basis of many other sciences. B2 - The student's skill in using the light microscope. B3 - The student's skill in examining tissue sections. B-4 The student's skill in diagnosing and describing natural tissue sections. B-5 The student's skill in differentiating between different tissue sections

Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Histologists examine tissue samples removed from a living body; By cutting these tissues into very thin, almost transparent slices using a special cutting tool known as a microtome, these thin sections may be stained with different dyes to increase the contrast between their different cellular components, so that they can be more easily identified using an optical or light microscope. Scientists can also use electron microscopy to reveal details of the organization of living tissues that are beyond the resolving power of light microscopes. Tissues can also be kept alive after being removed from the body by placing them in a suitable culture medium. This method is useful for culturing and examining certain types of cells as they continue to grow and differentiate.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	INTRODUCTION: Definition of histology and it's relation to other sciences, microscopic measurements, calculation of magnification, basic histological techniques.
Week 2	CYTOLOGY: Interphase nucleus, nuclear membrane, chromatin, duplication of chromatin, nucleolus, cytoplasmic organoids mitochondria
Week 3	, granular and smooth endoplasmic reticulum, ribosomes, Golgi apparatus, lysosomes, centrosomes, cell membrane
Week 4	BLOOD AND MYELOID TISSUE: Blood leukocyte:differential diagnosis, normal values in animals, erythrocytes: shape,structure and function, blood platelets:
Week 6	structure and function, myeloid tissue: general structure, erythropoesis, granulopoesis, structure and development of blood platelets
Week 7	NERVOUS TISSUE: Constituents of nervous tissue, neurons, Structure and classification, organoids of neurons, axons and dendrites,
Week 8	supporting cells in CNS and PNS, synapses, nerve fibers, cerebrospinal and autonomic ganglia
Week 9	CARTILAGE AND BONE: Cartilages, types and histological structure, bone, compact and spongy bone, structure and location, differences between bone and cartilages, intramembranous and endochondral ossification
Week 10	CARDIOVASCULAR SYSTEM: Blood vessels, types of arteries, types of veins, venules

Week 11	, types of capillaries, sinusoids, arteriovenous anastomosis, wall of the heart, cardiac valves, pulse conducting system.
Week 12	LYMPHATIC SYSTEM: Lymphatic vessels, lymphatic organs, tonsils, lymph nodes, hemolymph nodes, thymus, spleen: different theories of arteriovenous circulation
Week 13	, lymphatic nodules in other non lymphatic organs.
Week 14	RESPIRATORY SYSTEM: Nasal cavity, vestibular region, respiratory region, olfactory region, larynx, trachea, lung, bronchi, bronchioles, alveolar ducts, alveoli
Week 15	, interaleveolar septum, pleura.
Week 16	**exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	INTRODUCTION: Definition of histology and it's relation to other sciences, microscopic measurements, calculation of magnification, basic histological techniques.
Week 2	CYTOLOGY: Interphase nucleus, nuclear membrane, chromatin, duplication of chromatin, nucleolus, cytoplasmic organoids mitochondria
Week 3	, granular and smooth endoplasmic reticulum, ribosomes, Golgi apparatus, lysosomes, centrosomes, cell membrane
Week 4	BLOOD AND MYELOID TISSUE: Blood leukocyte:differential diagnosis, normal values in animals, erythrocytes: shape,structure and function, blood platelets:
Week 5	structure and function, myeloid tissue: general structure, erythropoesis, granulopoesis, structure and development of blood platelets
Week 6	NERVOUS TISSUE: Constituents of nervous tissue, neurons, Structure and classification, organoids of neurons, axons and dendrites,
Week 7	supporting cells in CNS and PNS, synapses, nerve fibers, cerebrospinal and autonomic ganglia
Week 8	CARTILAGE AND BONE: Cartilages, types and histological structure, bone, compact and spongy bone, structure and location, differences between bone and cartilages, intramembranous and endochondral ossification
Week 9	CARDIOVASCULAR SYSTEM: Blood vessels, types of arteries, types of veins, venules
Week 10	, types of capillaries, sinusoids, arteriovenous anastomosis, wall of the heart, cardiac valves, pulse conducting system.
Week 11	LYMPHATIC SYSTEM: Lymphatic vessels, lymphatic organs, tonsils, lymph nodes, hemolymph nodes, thymus, spleen: different theories of arteriovenous circulation
Week 12	, lymphatic nodules in other non lymphatic organs.

Week 13	RESPIRATORY SYSTEM: Nasal cavity, vestibular region, respiratory region, olfactory region, larynx, trachea, lung, bronchi, bronchioles, alveolar ducts, alveoli
Week 14	, interaleveolar septum, pleura.
Week 15	**exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	jungari (2020). Veterinary histology of Domestic Mammals Textbook of veterinary histology	Yes
Recommended Texts	the histology of the domestic animal	yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية				
Module Title	General Physiology		**Module Delivery**	
Module Type	C		☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET203			
ECTS Credits	6			
SWL (hr/sem)	150			
Module Level	First		**Semester of Delivery**	2

Administering Department	Physiology and pharm.	**College**	Veterinary medicine
Module Leader	Jabbar Abbas Ahmed	**e-mail**	Jabbar.ahmed@qu.edu.iq
Module Leader's Acad. Title	Prof.	**Module Leader's Qualification**	Ph.D
Module Tutor	Saadeya Ali Al-Gnami	**e-mail**	Saadeya.lefelef@qu.edu.iq
Peer Reviewer Name		**e-mail**	
Scientific Committee Approval Date	18/8/2024	**Version Number**	1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. to provide a course of study in mammalian, principally human, systems physiology, building on knowledge of basic physiological principles established in the Part IA Physiology of Organisms course; 2. to expand on some areas touched on in 1A Physiology of Organisms and to introduce new and more complex physiological functions; 3. to develop further practical biological skills introduced in 1A Physiology of Organisms; 4. to prepare students for a number of Part II Natural Science courses, principally Physiology, Development & Neuroscience, but also Pharmacology, Pathology and Zoology, among others.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. have an enhanced knowledge and appreciation of mammalian physiology; 2. understand the functions of important physiological systems including the cardio-respiratory, renal, reproductive and metabolic systems; 3. understand how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude, and how they can sometimes fail; 4. be able to perform, analyses and report on experiments and observations in physiology; 5. be able to recognize and identify principal tissue structures.

Indicative Contents المحتويات الإرشادية	**Structure and function of body systems** Physiology of Endocrine system, Nervous system, Cardiovascular system, Respiratory system, Urinary system, Gastrointestinal, Immune system, Integumentary system, Skeletal system and Muscle Physiology **Homeostasis** Understand the inter-relationship between systems in the maintenance of homeostasis. Recall key homeostatic systems throughout the bodily systems and how their disruption can lead to disease

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Whether you're teaching in-person or online, there are a few tricks that every instructor can use to improve their courses. It's important to remember that almost every modern student uses technology frequently in their day-to-day life. Incorporating technology into your anatomy and physiology courses is an excellent method of keeping your students more engaged.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to physiology, The cell and its function (Organization of the cell, membranous structures of the cell, cytoplasm and its organelles functional systems of the cell,
Week 2	Transport of substances through the cell membrane, radiation and metabolism of energy)
Week 3	nerve action potential, initiation of the action potential, special characteristics of signal transmission in nerve trunks, synapses, neurotransmitters and the neuromuscular junction
Week 4	Muscle (types of muscles and structures, General mechanism of muscle contraction, molecular mechanism of muscle contraction, molecular characteristics of the contractile filaments energetic of muscle contraction, characteristics of whole muscle contraction, mechanics of skeletal muscle contraction, rigor moris and physiology of cardiac muscle
Week 5	The autonomic nervous system (General organization of the autonomic nervous system, physiologic anatomy of the sympathetic nervous system, physiologic anatomy of the

	parasympathetic nervous system, chemical transmission at autonomic junctions, basic characteristics of sympathetic and parasympathetic function, receptors on the effector organs, effects of sympathetic and parasympathetic stimulation on specific organs ″Alarm ″ or ″Stress″ response of the sympathetic nervous system and system and control of the autonomic nervous system).
Week 6	Blood composition and physiology (formed elements, functions of the blood, erythrocytes, erythropoiesis, hemoglobin, reactions of hemoglobin,
Week 7	. white blood cells, chemotaxis
Week 8	platelets, plasma proteins, blood coagulation, blood groups, immunity. Lymph: Composition and function. Cerebrospinal fluid: Composition and function
Week 9	Cardiovascular system (structure of the heart, and course of blood flow through the heart chambers and heart valves, cardiac cycle, heart sounds, the electrocardiogram cardiac output
Week 10	blood flow in vessels, blood pressure, capillary circulation, venous circulation, cardiovascular regulatory mechanisms, innervations of blood vessels, cardiac innervation, vasomotor center, baroreceptors and blood-brain barrier
Week 11	Respiration (functional structures, mechanics of pulmonary ventilation, partial pressure of gases in alveolar and blood, surfactant, surface tension, and collapse of the alveoli, pulmonary volumes, pulmonary capacities,
Week 12	alveolar ventilation, dead space and its effect on alveolar ventilation, functions of the respiratory. Passageways, mechanics of respiration, transport of gases in the blood and regulation of respiration
Week 13	Digestive system: salivary glands and saliva, structures of digestive system, gastric secretion, regulation of gastric secretion,
Week 14	exocrine portion of the pancreas, liver and biliary system, small intestine
Week 15	intestinal secretion, intestinal motility, large intestine, defecation, absorption, rumination, microbiology of the rumen.

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction to apparatus and instruments
Week 2	Fragility of red blood cell
Week 3	RBCs count

Week 4	WBC count
Week 5	Estimation of hemoglobin
Week 6	The simple muscle twitch
Week 7	The effect of temperature on muscle
Week 8	Effect of strength on muscle contraction
Week 9	Summation of two stimuli and tetanus
Week 10	Muscle fatigue
Week 11	Frog sciatic nerve and gastrocnemius
Week 12	Differential leukocyte count
Week 13	Lung volumes
Week 14	Measurement of pulmonary ventilation
Week 15	Estimation of packed cell volume.

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Ganong, W.F. (2011). Review of Medical Physiology. 20th Edition. Lange Medical Books/McGraw-Hill Medical Publishing Division. USA; p.543.	yes
Recommended Texts	Guyton,A.C. and Hall,J.E.(2011). Textbook of medical physiology. 11th Ed. Saunders Company	yes
Websites	https://books-library.website/c-Veterinary-medicine-download	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Systemic Physiology			**Module Delivery**	
Module Type	C			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET209				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	second		**Semester of Delivery**	2	
Administering Department	Physiology and pharm.		**College**	Veterinary medicine	
Module Leader	Hayder alzamely		**e-mail**		
Module Leader's Acad. Title	Prof.		**Module Leader's Qualification**	Ph.D	
Module Tutor	Saadeya Ali Al-Gnami		**e-mail**	Saadeya.lefelef@qu.edu.iq	
Peer Reviewer Name	Hayder ghazi		**e-mail**		
Scientific Committee Approval Date	18/8/2024		**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1.To provide students with important knowledge about of the major physiological systems, and be able to associate anatomical areas with their specific function. 2.To make students understand the role of evolutionary processes (e.g. natural selection) in driving the organization of physiological systems.

	3.To make students familiar with physiological challenges animals face, how those challenges vary in relation to the animals' environment, and the processes by which animals deal with these challenges. 4.Students will be trained on how they deal with describe structural differences of major physiological systems that characterize different taxonomic groups of animals. 5.To make students familiarized with relate physiological processes, from the biochemical to the system level, to the function of the entire organism in its environment.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. have an enhanced knowledge and appreciation of mammalian physiology; 2. understand the functions of important physiological systems including the cardio-respiratory, renal, reproductive and metabolic systems; 3. understand how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude, and how they can sometimes fail; 4. be able to perform, analyse and report on experiments and observations in physiology; 5. be able to recognise and identify principal tissue structures.
Indicative Contents المحتويات الإرشادية	**Structure and function of body systems** Physiology of Endocrine system, Nervous system, Cardiovascular system, Respiratory system, Urinary system, Gastrointestinal, Immune system, Integumentary system, Skeletal system and Muscle Physiology **Homeostasis** Understand the inter-relationship between systems in the maintenance of homeostasis. Recall key homeostatic systems throughout the bodily systems and how their disruption can lead to disease

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Whether you're teaching in-person or online, there are a few tricks that every instructor can use to improve their courses. It's important to remember that almost every modern student uses technology frequently in their day-to-day life. Incorporating technology into your anatomy and physiology courses is an excellent method of keeping your students more engaged.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Central Nervous system: Brain, brain stem, medulla oblongata,

Week 2	reticular formation of the brain stem, thalamus, hypothalamus, temperature regulation,
Week 3	sensory system, motor system (spinal cord and reflexes), learning and memory and limbic system.
Week 4	Endocrine system: the relationship between nervous system and endocrine glands, hormones, types of hormones.
Week 5	mechanisms of hormone action, pituitary gland.
Week 6	thyroid gland, hormonal control of calcium metabolism
Week 7	parathyroid glands, adrenal gland.
Week 8	pancreatic hormones, prostaglandins, atrial natriuretic peptide, pineal gland and thymus gland
Week 9	Male and female reproductive system: structures, spermatogenesis, structure of mature spermatozoon, endocrine function of the testes and control of testicular function
Week 10	Structure of female reproductive system, types of follicles, estrous cycle, menstrual cycle, ovarian cycle, uterine cycle, vaginal cycle.
Week 11	puberty, ovarian hormones, abnormalities of ovarian functions. Pregnancy, placental hormones, parturition and lactation.
Week 12	Kidney: nephron structure and blood supply, plasma volume, total blood volume, glomerular filtration.
Week 13	factors affecting the GFR, tubular function, tubular secretion, water excretion, osmotic dieresis, diuretics.
Week 14	factors affecting sodium excretion, regulation of potassium excretion, functions of ureter and urinary bladder.
Week 15	Acid-base balance: Chemical buffer, regulation of CO2 concentration by the respiratory system, regulation of plasma HCO3- concentration by the kidney, fate of H+ in the urine and body fluids.

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Estimation of erythrocyte sedimentation.
Week 2	The Wintrobe erythrocyte indexes
Week 3	Blood groups
Week 4	Coagulation time

Week 5	Bleeding time
Week 6	Blood pressure
Week 7	Effect of exercise and gravity on blood pressure and venous pressure
Week 8	Urine examination
Week 9	Frogs heart(sequence of the heart beat and effect of acetylcholine on heart).
Week 10	Extrasystole and compensatory pause and Stannius ligatures
Week 11	Evaluation of seminal quality
Week 12	Estrous cycle of the rat
Week 13	Overiectomy in rat
Week 14	Concentration of spermatozoa
Week 15	Review

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Guyton and Hall(2011). Textbook of Medical Physiology	yes
Recommended Texts	McDonald,D.V.M.(2003). Veterinary endocrinology and reproduction, 2nd Ed. Lea and Febiger. Philadelphia	yes
Websites	https://books-library.website/c-Veterinary-medicine-download	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	Biostatistics	**Module Delivery**
Module Type	C	☒ **Theory**

Module Code	**VET210**			☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
ECTS Credits	3				
SWL (hr/sem)	48				
Module Level	2		**Semester of Delivery**	2	
Administering Department	Public health		**College**	Veterinary medicine	
Module Leader	Kadhim Hassan abbas		**e-mail**	Kadhim.abbas@qu.edu.iq	
Module Leader's Acad. Title	Assist. professor		**Module Leader's Qualification**	Master	
Module Tutor	Israa abd alhassan		**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	/8/2024		**Version Number**		

Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	3- Teaching how to deal with different animals. 4- Methods of controlling different animals for examination, treatment or cleaning.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	3- Teaching how to deal with DATA from experiments. 4- Read and understanding Tables and figures in Thesis and paper researches. 5- Select the typical test for data analysis
Indicative Contents المحتويات الإرشادية	Learning the students all research or thesis or hypothesis must be contain statistical analysis and if not analyzed not have scientific value.

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	Paying attention to the methods of DATA and analysis with perfect test to increase the time and costs for experimental designee

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to statistics and statistics symbols.
Week 2	Tabular and graphical presentation.
Week 3	Measures of central tendency.
Week 4	Measures of central tendency.
Week 5	Measures of dispersion or variation .
Week 6	Measures of dispersion or variation.
Week 7	Continuous probability distribution, normal distribution
Week 8	Elementary probability theory
Week 9	Tests of hypotheses
Week 10	Z-distribution.
Week 11	T- distribution.
Week 12	Chi- square distribution.
Week 13	F-distribution
Week 14	F-distribution
Week 15	Simple regression and correlation.
Week 16	Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction to statistics and statistics symbols.
Week 2	Tabular and graphical presentation.
Week 3	Measures of central tendency.
Week 4	Measures of central tendency.
Week 5	Measures of dispersion or variation .
Week 6	Measures of dispersion or variation.
Week 7	Continuous probability distribution, normal distribution
Week 8	Elementary probability theory
Week 9	Tests of hypotheses
Week 10	Z-distribution.
Week 11	T- distribution.

Week 12	Chi- square distribution.
Week 13	F-distribution
Week 14	F-distribution
Week 15	Simple regression and correlation.
Week 16	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	**Medical statistics from A to Z** Guide for Clinicians and Medical Students Second Edition Guide for Clinicians and Medical Students Second Edition	Yes
Recommended Texts		
Websites		

MODULE DESCRIPTION FORM

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	Neural and vascular Anatomy	**Module Delivery**
Module Type	core	☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**
Module Code	VET206	
ECTS Credits	6	
SWL (hr/sem)	78	

Module Level		1	**Semester of Delivery**		1
Administering Department		Anatomy &histology	**College**	Veterinary medicine	
Module Leader	Fatimah swadi		**e-mail**	fatimah.zghair@qu.edu.iq	
Module Leader's Acad. Title		Assit.professor	**Module Leader's Qualification**		PHD
Module Tutor	Maha abd al hadi&Saffia Karim		**e-mail**	Maha.alabdula@qu.edu.iq Saffia.alumare@qu.edu.iq	
Peer Reviewer Name		Raad kahat	**e-mail**	Raaded123@gmail.com	
Scientific Committee Approval Date		1/6/2025	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	The general objective of teaching basic sciences in the anatomy department is to provide important scientific knowledge that includes knowledge of the structural composition of the body at the level of systems, organs and cells. Knowledge of scientific methods for studying anatomy and modern molecular methods. Raising the ability of students to link anatomical facts with clinical applications using radiography, ultrasound, magnetic resonance imaging and histological slides. Applying professional and ethical education for students to deal with animal cadavers.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Knowledge A-1 The student knows the basic methods of studying veterinary anatomy. A-2 Enabling the student to explain and describe the body organs using modern methods. A-3 Enabling the student to apply the tissue sectioning technique and the tissue immunology technique. A-4 The student analyzes the main structures that make up the body systems, especially the systems that affect animal productivity. A-5 The student can express his opinion on the quality of animals in private fields and farms. A-6 The student can plan various animal production projects.

	B- Skill 39 B1 - The student acquires anatomy skills. B2 - The student acquires the skills of analyzing and comparing the structures of different animal bodies. B3 - The student acquires the necessary skills to select good qualities for farm animals C- Values: C-1 The learner provides assistance to his friends in the class and group work C-2 The learner practices volunteer work with full awareness and understanding C-3 The student tries to maintain mutual respect between him and his classmates in the class, as well as mutual respect with the educational family in the college C-4 The student can become familiar with the ethics of the profession and the relationship with the breeders, and the motivation is moral and emotional.
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be followed in delivering this unit is to stimulate students' participation in dissection, while at the same time developing and enriching their skills in handling dissection instruments. This will be done through classroom, interactive lessons, as well as by conducting simple experiments that include sampling activities that interest students.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Lymphatic system Introduction, lymph, lymph vascular system. lymphatic tissue, lymph vessels, lymph capillaries, ,
Week 2	lymphatic tissue structures
Week 3	solitary lymph nodules

Week 4	tonsils, lymph nodes
Week 5	lymphocenter, hemal nodes, lymph trunks and ducts
Week 6	thymus, spleen .
Week 7	NERVOUS SYSTEM Development of the brain. Central nervous system: brain,
Week 8	parts of the brain (spinal cord, cranial nerves, spinal nerves)
Week 9	Autonomic nervous system
Week 10	sympathetic division, parasympathetic division
Week 11	Meninges, cerebrospinal fluid.
Week 12	PNS
Week 13	SENSE ORGANS The eye (tunics, parts, chambers, muscles),
Week 14	blood supply, nerve supply, lacrimal apparatus
Week 15	ear (divisions and cavities).
Week 16	**exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	The eye (tunics, muscles, nerves, chambers)
Week 2	The brain, cranial and spinal meninges, parts of brain, cranial nerves
Week 3	Dissection of neck region (lateral and ventral surfaces) including chief veins, nerves, arteries, muscles, thyroid gland, lymph nodes, trachea, esophagus.
Week 4	Dissection of neck region (dorsal and lateral surfaces) including chief muscles and nerves
Week 5	Dissection of thorax, thoracic fascia, muscles of thoracic wall, respiratory muscles, internal thoracic fascia, pleura, pulmonary ligament, thymus, lung comparative, trachea, bronchial tree
Week 6	Nerves in thoracic cavity (phrenic, vagus , sympathetic chain), pericardium ,cranial and caudal venae cavae, and venous azygous, longus colli m. and transversus thoracic muscle.
Week 7	Aortic arch, common brachiocephalic trunk with its branches, thoracic aorta with its branches.
Week 8	Viscera: stomach (comparative).
Week 9	Viscera: small intestine (comparative).
Week 10	Viscera: large intestine (comparative).

Week 11	Viscera: liver and its ligaments (comparative).
Week 12	Lymph centers in abdominal cavity, spleen.
Week 13	Diaphragm (parts, hiatuses).
Week 14	Abdominal aorta with its branches, distribution of autonomic nervous system in region behind diaphragm
Week 15	Terminal branches of abdominal aorta in pelvic cavity with autonomic nerves in it
Week 16	exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Bragulla, H., H. E. König and H.-G. Liebich (2007). Veterinary Anatomy of Domestic Mammals Textbook of veterinary anatomy	Yes
Recommended Texts	the anatomy of the domestic animal	yes
Websites		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	Biochemistry	**Module Delivery**
Module Type	C	☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**
Module Code	VET207	
ECTS Credits	5	
SWL (hr/sem)	125	

Module Level		2	**Semester of Delivery**		2
Administering Department		Physiology and pharm.	**College**	Veterinary medicine	
Module Leader	Miaad Jabbar Sahib		**e-mail**	miaad.Sahib@qu.edu.iq	
Module Leader's Acad. Title		Assist. Prof.	**Module Leader's Qualification**		PhD
Module Tutor	Dhama Kadim		**e-mail**	Dhama.Kadim@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date		8/8/2024	**Version Number**		1

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. We will introduce students to basic laboratory techniques for determination of different body components such as: glucose, cholesterol, protein, lipoproteins , urea, uric acid (mainly blood and urine) and determination of . 2. Teaching students about the fundamental aspects of nucleic acids (DNA and RNA) and the formation of protein and the genetic code. 3. Promote the success of students in the upper scientific levels of veterinary medicine associated with chemistry by fostering the development of scientific skills. 4. Safety is the primary concern in any laboratory, particularly in chemistry. The student will acquire the ability to implement safe laboratory procedures. 5. Identify fatty acids types, transport and metabolism, in addition to their role in energy generation. 6. Understand mechanism of action, chemistry, synthesis and metabolic role of various hormones . 8.To learn about the diseases associated with abnormal levels of hormones (underproduction and overproduction).
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Acquire knowledge of the basic principles about biomolecules, in addition to learn their biochemical importance according to their chemical structure. 2. Gain an understanding of the basic principles of energy synthesis and the major bioenergetics. 3. The student will be familiar with the fundamental concepts of protein synthesis and the correlated processes including replication of DNA, RNA synthesis, transcription and translation.

	٤.Learn the fundamental principles of analytic chemistry, which is an essential component in veterinary school courses. 5. Acquire a comprehensive understanding of the fundamental concepts of beta-oxidation and ketone bodies formation according to the feeding state and the physiological demands.
Indicative Contents المحتويات الإرشادية	1. Understanding the properties of biomolecules: We will introduce students to the fundamental principles of different component of the body according to their chemistry by focusing on the molecular structures, properties, and chemical reactivity of a variety of compounds, including: carbohydrates, proteins, lipids and nucleic acids . 2. The fundamental concepts of energy production inside the body and the major bioenergetics, in addition to learn how to calculate the amount of energy as ATP. 3. Key Competencies laboratory skills include liquid handling and using of spectrophotometer. 4. The course explores the fundamental concepts and mechanisms behind the role of enzymes in acceleration of chemical reactions. It also emphasizes the ability to illustrate the mechanics of these reactions. 5. Classes of enzyme inhibition: Enhance the student's understanding of a wider range of enzyme inhibition involving reversible and irreversible inhibition and enhance their ability to recognize between them. 6. Writing abilities—enhancing students' capacity to write scientific reports to aid them in their pursuit of advanced veterinary degrees.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Conducting captivating chemical experiments to engage students 2. Establish a connection between biochemistry and daily life. 3. Motivate students to be passionate about their biochemistry abilities. Students are more likely to be enthusiastic about potential career paths, as many consider them at the university level. 4. Asking intriguing questions at the beginning of a general biochemistry lecture stimulates students' curiosity and enthusiasm for biochemistry.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Lipids: introduction, classification of lipids.
Week 2	Lipids: digestion of lipids, absorption of lipids.
Week 3	Lipids: metabolism of fatty acids.
Week 4	Lipids: β-oxidation of fatty acids.
Week 5	Lipids: biosynthesis of fatty acids.
Week 6	Lipids: cholesterol, lipoproteins.
Week 7	Hormones: definition, classification, biosynthesis and storage of hormones.
Week 8	Hormones: Transport and cellular receptors of hormones, chemical messengers of hormones.
Week 9	Nucleic acids: structure of nucleic acids.
Week 10	Nucleic acids: types of nucleic acids.
Week 11	Nucleic acids: replication of DNA.
Week 12	Nucleic acids: RNA synthesis.
Week 13	Nucleic acids: transcription.
Week 14	Nucleic acids: translation/protein synthesis.
Week 15	Nucleic acids: the genetic code.

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Photometric methods in biochemical analysis.
Week 2	Determination of serum total protein.
Week 3	Calibration curve of protein.
Week 4	Determination of serum amylase activity.
Week 5	Determination of serum inorganic phosphate.
Week 6	Determination of serum total calcium.
Week 7	Determination of serum bilirubin.
Week 8	Determination of serum creatinine.
Week 9	Determination of serum uric acid.
Week 10	Determination of serum cholesterol.

Week 11	Enzymatic method for glucose estimation.
Week 12	Determination of serum total lipid.
Week 13	Determination of serum urea.
Week 14	DNA analysis.
Week 15	RNA analysis.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Vasudevan D.M. et al. (2023). Textbook of biochemistry for medical students. 10th edition. Jaypee brothers' medical publishers (P) LTD.	yes
Recommended Texts	Murray, R. K. et al. (2015). Harpers illustrated biochemistry. McGraw Hill Lange.	yes
Websites	https://awesomechem.wordpress.com/wp-content/uploads/2016/10/harpers-illustrated-biochemistry-28th-ed-robert-k-murray-et-al-mcgraw-hill-2009.pdf	

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية				
Module Title	systemic histology and embryology		**Module Delivery**	
Module Type	core		☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	VET208			
ECTS Credits	6			
SWL (hr/sem)	78			
Module Level	2	**Semester of Delivery**	2	
Administering Department	Anatomy &histology	**College**	Veterinary medicine	

Module Leader	Nabeel Abid Murad almammorri	**e-mail**	Nabeel.almammorri @qu.edu.iq
Module Leader's Acad. Title	Assit.professor	**Module Leader's Qualification**	PHD
Module Tutor	Eman fasial &Hazem Karim	**e-mail**	Eman.fasial@qu.edu.iq hazem.almhannna@qu.edu.iq
Peer Reviewer Name	Eman ibrahim	**e-mail**	Eman.alhacham@qu.edu.iq
Scientific Committee Approval Date	1/6/2025	**Version Number**	2

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Identify the tissue structure of different body parts in general and in different animals. -2. Make a comparison of the tissue structure of all body parts between different animals and humans. -3. Introduce the student to the different parts of the microscope and teach him how to use it. -4. The student learns how to examine different tissue sections and differentiate them from each other. -5. Develop the student's ability to diagnose normal tissue sections in order to differentiate them in the next stage from pathological tissue sections. -6. Study the types of blood cells as one of the types of connective tissues to benefit from them in knowing the natural components of blood. -7. Teach the student how to take samples of body parts and treat them histologically and make tissue sections.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Cognitive objectives A-1 The student will learn about the tissue structure of the different organs of the body. A-2 The student will learn about the tissue structure of the organs of the body in different types of animals. A-3 The student will learn about the natural structure of each organ of the body. A-4 The student will learn how to differentiate each organ from other organs in the body. A-5 The student will learn how to take samples and treat them histologically. A-6 The student will learn how to make tissue sections. B- Course skill objectives. B1 - Preparing the student properly to have a solid foundation in the specialization of histology, which is considered the basis of many other sciences.

	B2 - The student's skill in using the light microscope. B3 - The student's skill in examining tissue sections. B-4 The student's skill in diagnosing and describing natural tissue sections. B-5 The student's skill in differentiating between different tissue sections
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Histologists examine tissue samples removed from a living body; By cutting these tissues into very thin, almost transparent slices using a special cutting tool known as a microtome, these thin sections may be stained with different dyes to increase the contrast between their different cellular components, so that they can be more easily identified using an optical or light microscope. Scientists can also use electron microscopy to reveal details of the organization of living tissues that are beyond the resolving power of light microscopes. Tissues can also be kept alive after being removed from the body by placing them in a suitable culture medium. This method is useful for culturing and examining certain types of cells as they continue to grow and differentiate.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	DIGESTIVE SYSTEM: Oral cavity, lip, tongue, lingual papillae, esophagus, stomach,
Week 2	nonglandular stomach in ruminants: rumen, reticulum, omasum, abomasums, glandular stomach, cardiac portion, fundic portion, pyloric portion
Week 3	, small intestine: duodenum, jejunum, ileum,large intestine, colon, recto anal junction, accessory glands, liver, pancreas
Week 4	URINARY SYSTEM: Unipyramidal kidney, multipyramidal kidney, general microscopic

	structure, nephron, portions and function guxtaglomerular complex, portions and function, ureter, urinary bladder, urethra.
Week 6	ENDOCRINE SYSTEM: Pituitary gland, embryonic origin, adenohypophysis and endocrine cell types, neurohypophysis, hypothalamic portion, thyroid gland, structure and function, adrenal gland, structure and function, parathyroid gland, structure and function, endocrine cells in other organs
Week 7	MALE REPRODUCTIVE SYSTEM: Histological structure of testis, seminiferous tubules, spermatozoa development, adult spermatozoa, interstitial cells,epididymis, ductus deferens, prostate gland, vesicular gland, bulbourethral gland.
Week 8	Female reproductive system: Histological structure of ovary, ovarian follicle development, ovulation, corpus luteum and function oviduct portions histological structure of uterus, cyclic changes in the endometrium, cervix, vagina, mammary gland and functional conditions
Week 9	SENSORY ORGANS: Eye: histological structure: cornea, sclera, choroid, ciliary body, iris, retina, eyelid. Ear: histological structure of internal ear: osseous labyrinth, membranous labyrinth, cochlear duct, organ of corti
Week 10	SKIN: Epidermis, dermis, hair follicles, structure, classification, arrangement, skin glands: sebaceous gland, sweat glands, arrector pili muscle
Week 11	Introduction, oogenesis, Spermatogenesis Fertilization, cleavage, Implantation Trilaminar embryonic disc
Week 12	Placentation with classification Development of cardiovascular system
Week 13	. Development of urogenital system Development of body cavities

Week 14	Development of digestive system Development of respiratory system
Week 15	Development of nervous system.
Week 16	**exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	DIGESTIVE SYSTEM: Oral cavity, lip, tongue, lingual papillae, esophagus, stomach,
Week 2	nonglandular stomach in ruminants: rumen, reticulum, omasum, abomasums, glandular stomach, cardiac portion, fundic portion, pyloric portion
Week 3	, small intestine: duodenum, jejunum, ileum,large intestine, colon, recto anal junction, accessory glands, liver, pancreas
Week 4	URINARY SYSTEM: Unipyramidal kidney, multipyramidal kidney, general microscopic structure, nephron, portions and function
Week 5	guxtaglomerular complex, portions and function, ureter, urinary bladder, urethra.
Week 6	ENDOCRINE SYSTEM: Pituitary gland, embryonic origin, adenohypophysis and endocrine cell types, neurohypophysis, hypothalamic portion,
Week 7	thyroid gland, structure and function, adrenal gland, structure and function, parathyroid gland, structure and function, endocrine cells in other organs
Week 8	MALE REPRODUCTIVE SYSTEM: Histological structure of testis, seminiferous tubules,
Week 9	spermatozoa development, adult spermatozoa, interstitial cells, epididymis, ductus deferens, prostate gland, vesicular gland, bulbourethral gland.
Week 10	Female reproductive system:

	Histological structure of ovary, ovarian follicle development, ovulation, corpus luteum and function oviduct portions
Week 11	histological structure of uterus, cyclic changes in the endometrium, cervix, vagina, mammary gland and functional conditions
Week 12	SENSORY ORGANS: Eye: histological structure: cornea, sclera, choroid, ciliary body, iris, retina, eyelid.
Week 13	Ear: histological structure of internal ear: osseous labyrinth, membranous labyrinth, cochlear duct, organ of corti.
Week 14	SKIN: Epidermis, dermis, hair follicles, structure, classification, arrangement, skin glands: sebaceous gland, sweat glands, arrector pili muscle
Week 15	**exam**

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	jungari (2020). Veterinary histology of Domestic Mammals Textbook of veterinary histology	Yes
Recommended Texts	the histology of the domestic animal	yes
Websites		

نموذج وصف المقرر

وصف المقرر اللغة العربية

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

١. المؤسسة التعليمية	جامعة القادسية/كلية الطب البيطري	
٢. القسم العلمي / المركز	التشريح والانسجة	
٣. اسم / رمز المقرر	اللغة العربية QU06 م.م. منى نعمة جبار عباس الفتلي muna.neamah@qu.edu.iq	
٤. أشكال الحضور المتاحة	النظري	
٥. الفصل / السنة	فصلي	
٦. عدد الساعات الدراسية (الكلي)	٢	
٧. تاريخ إعداد هذا الوصف	2025/8 /7	
٨. أهداف المقرر		
تنمية روح الاعتزاز باللغة العربية.		
تطوير مهارات الطلاب اللغوية.		
الارتقاء بمستوى الطلبة المهني والبحثي.		
تنمية القابليات النحوية والأدبية لدى الطالب الجامعي.		
تنشئة جيل يهتم بأرث أمته الأدبي والفكري.		

العمل على صون فصاحة اللغة العربية.	

٩. مخرجات المقرر وطرائق التعليم والتعلم والتقييم
أ- الاهداف المعرفية أ١-تأهيل الطلبة من الحصول على المعرفة والفهم للاطلاع الفكري وأسس وتطبيقات علوم اللغة العربية. أ٢-تأهيل الطلبة من الحصول على المعرفة والفهم لعلم النحو. أ٣- تأهيل الطلبة من الحصول على المعرفة والفهم لعلم الصرف. أ٤-تأهيل الطلبة من الحصول على المعرفة والفهم لعلم الإملاء والتعبير. أ٥-تأهيل الطلبة من الحصول على المعرفة والفهم لعلم الأدب. أ٦- تأهيل الطلبة من الحصول على المعرفة والفهم للمعايير الأساسية لعلوم اللغة العربية.
ب - الاهداف المهاراتية الخاصة بالمقرر ب١ - تعريف الطالب على أهمية (اللغة العربية) من الناحية العلمية والتطبيقية. ب٢ - تنمية مهارات التحدث باللغة العربية. ب٣ - تأهيل الطالب بالمعارف والمخرجات الخاصة بعلم النحو. ب٤- تطوير معارف ومدركات الطالب.
طرائق التعليم والتعلم : المحاضرات الورقية والإلكترونية واستخدام برنامج البوربوينت والسبورة .
طرائق التقييم : التحضير اليومي (الإمتحان الشفوي).
ج- الاهداف الوجدانية والقيمية ج١-جعل الطالب يهتم بدراسة وفهم اللغة العربية. ج٢-إدراك الطالب أن اللغة العربية هي من جملة اللغات الحية. ج٣-جعل الطالب محباً للغة العربية . ج٤- رفض اي محا لة للتقليل من شأن اللغة العربية واخراجها من غايتها في التواصل .
طرائق التعليم والتعلم
إثارة أسئلة متنوعة يمكن عبرها استدعاء المعلومات ، وشرح موضوع ما عبر مصادر متنوعة وحاولة ربط المصادر بعضها ببعض.
طرائق التقييم

اجراء الاختبارات السريعة اليومية والاختبارات الفصلية مع التنوع في طبيعة الاسئلة ،وكتابة التقاربر العلمية والواجبات البيتية
د - المهارات العامة والتأهيلية المنقولة (المهارات الأخرى المتعلقة بقابلية التوظيف والتطور الشخصي). د١-جعل اللغة وسيلة للإتصال بين بني البشر . د٢-جعل اللغة وسيلة يستفيد منها الفرد للتمتع بالمطالعة والقراءة. د٣-توظيفها للإقناع . د٤- جعل اللغة أداة للنصح والإرشاد .

١٠.بنية المقرر					
الأسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة / أو الموضوع	طريقة التعليم	طريقة التقييم
-الاول	2	النعت	تعريفه، أقسامه،أنواعه وامثلة تطبيقية عليه	المحاضرات الورقية والإلكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي (الامتحان الشفوي)
الثاني	2	البدل	تعريف،أنواعه وأمثلة تطبيقية عليه	المحاضرات الورقية والالكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي والامتحان الشفوي
الثالث	2	التوكيد اللفظي والمعنوي .	تعريفه وأقسامه وأمثلة تطبيقية عليه	المحاضرات الورقية والإلكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي (الامتحان الشفوي)
الرابع	2	العطف	تعريفه وانواعه وامثلة تطبيقية عليه	المحاضرات الورقيةواستخ دام برنامج البوربوينت والسبورة	التحضير اليومي(الامتح ان الشفوي)
الخامس	2	الممنوع من الصرف	تعريفه وأمثلة تطبيقية عليه	المحاضرات الورقية والإلكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي (الامتحان الشفوي)
السادس	2	المدارس الأدبية في العصر الحديث	(الاحياء، المهجر ، أبولو، الديوان،الحر)	المحاضرات الورقية والإلكترونية واستخدام برنامج	التحضير اليومي (الامتحان الشفوي)

				البوربوينت والسبورة	
السابع	2	مدرسة الإحياء	تعريفها وخصائصها ومميزاتها وأبرز روادها	المحاضرات الورقية والالكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي والامتحان الشفوي
الثامن	2	مدرسة المهجر	تعريفها ومميزاتها وأبرز روادها	المحاضرات الورقية والالكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي (الامتحان الشفوي)
التاسع	2	مدرسة أبولو	تعريفها وخصائصها ومميزاتها وابرز روادها	المحاضرات الورقية والالكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي(الامتحان الشفوي)
العاشر	2	مدرسة الديوان	تعريفها وخصائصها ومميزاتها وأبرز روادها	المحاضرات الورقية والالكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي(الامتحان الشفوي)
11	2	مدرسة الشعر الحر	تعريفها وخصائصها ومميزاتها وأبرز روادها	المحاضرتت الورقية والالكترونية واستخدام برنامج البوربوينت	التحضير اليومي(الامتحان الشفوي)
12	2	نماذج شعراء من المدارس الادبية في العصر الحديث	الجواهري ، جبران خليل جبران ، السياب .	المحاضرات الورقية والالكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي والامتحان الشفوي
13	2	الجواهري	تعريفه، حياته ونشأته،مؤلفاته وأبرز قصائده	المحاضرات الورقية والألكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي (الامتحان الشفوي)
14	2	جبران خليل جبران	تعريفه ، حياته ونشأته،مؤلفاته وأبرز قصائده	المحاضرات الورقية والالكترونية واستخدام برنامج البوربوينت والسبورة	التحضير اليومي (الامتحان الشفوي)
15	2	بدر شاكر السياب	تعريفه ،حياته ونشأته ،مؤلفاته وأبرز قصائده	المحاضرات الورقية والالكترونية واستتخدام برنامج البوربوينت والسبورة	التحضير اليومي(الامتحان الشفوي)

١١.البنية التحتية	
١- الكتب المقررة المطلوبة	-التوابع في النحو العربي محمود سليمان ياقوت -دراسة العلة النحوية في التوابع للقصاب الرومي -الفن ومذاهبه في الشعر العربي لشوقي ضيف
٢- المراجع الرئيسية (المصادر)	*القرآن الكريم *شرح ابن عقيل *الوجيز في اللغة العربية *قواعد اللغة العربية (النحو والصرف الميسر) *الفن ومذاهبه في الشعر العربي لشوقي ضيف
أ- الكتب والمراجع التي يوصى بها (المجلات العلمية ،التقارير ،.....)	الوجيز في اللغة العربية لغير المتخصصين جامع الدروس العربية /مصطفى الغلاييني
ب- المراجع الالكترونية ،مواقع الانترنيت ،.....	المواقع العديدة التي تعنى بمادة اللغة العربية ومن ضمنها اليوتيوب والبحوث العلمية .

١٢.خطة تطوير المقرر الدراسي
اضافة المزيد من المهارات للطلبة لتعليم اللغة العربية وذلك باعداد الملصقات الجدارية التي توضح للطلبة اهمية اتقان اللغة العربية في كافة مجالات العلوم الاكاديمية والتطبيقية

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية/ اللغة الانكليزية

Module Information معلومات المادة الدراسية		
Module Title	**اللغة الانكليزية**	**Module Delivery**
Module Type	B	☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical**
Module Code	**QU21**	

ECTS Credits	2		☐ **Seminar**		
SWL (hr/sem)	33				
Module Level	2		**Semester of Delivery**	2	
Administering Department	Physiology and pharm.		**College**	Veterinary medicine	
Module Leader	Israa Najm Abdullah Al-Ibadi		**e-mail**	Esraa.najm@qu.edu.iq	
Module Leader's Acad. Title	Assist. Prof		**Module Leader's Qualification**	PHD	
Module Tutor	Israa Najm Abdullah Al-Ibadi		**e-mail**	Esraa.najm@qu.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date			**Version Number**	1	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	- enhance the communication skills of students. - development of the four language skills (speaking, listening, reading and writing).
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. The knowledge, skills, values and ethics that a student must possess upon graduation from a particular course or educational program. 2. Enabling students to gain knowledge of the principles of speech and sentences and the types they consist of. 3. Enabling students to acquire knowledge of the correct pronunciation of English vocabulary, especially scientific vocabulary. 3. Students acquire the ability to speak correctly and in accordance with the principles of the language. 4. Students acquire the ability to pronounce letters correctly in line with the principles of language and vocabulary. 5. Students acquire the skill of writing sentences correctly and with the fewest possible mistakes.

Indicative Contents المحتويات الإرشادية	1- The course covers core language and skills students need to communicate successfully in technical specializations, 2. give their opinions and participate in discussions on a wide range of topical issues, 3. communicate effectively in written format on a range of contemporary topics, especially the technical ones, 4. understand the key points of a range of moderately complex oral and written texts with relative ease, 5. communicate effectively as part of a multicultural group, 6. manage, interpret and create meaning using a variety of digital devices and tools

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Use of audio, visual and video presentation tools to engage students 2. Establish a conversation connected to daily life. 3. Motivate students to be passionate about their abilities to listen and speak. Students are more likely to be enthusiastic about potential career paths, as many consider them at the university level. 4. Asking intriguing questions at the beginning of the lecture stimulates students' curiosity and enthusiasm for the English language.

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Grammar, vocabulary and everyday English : **Getting to Tenses,** know you Present, past, future **,** Using a bilingual dictionary **,** Parts of speech, adjective, preposition , Words with more than one meaning, Social expressions 1

Week 2	Grammar, vocabulary and everyday English; **Present tenses,** Present Simple**,** Present Continuous**,** have/have got**,** Describing countries**,** This country exports wool. p14**,** Collocation**,** Daily life**,** listen to music talk to my friends p17, Making conversation, Asking questions, Showing that you're interested
Week 3	Grammar, vocabulary, everyday English**, Past tenses**, Past Simple, Past Continuous, Irregular verbs Making connections, breaklmend, lose/find p Nouns, verbs, and adjectives, Suffixes to make different parts of speech, discuss, Making negatives, Time expressions t
Week 4	Grammar, vocabulary and everyday English : **Quantity,** shopping! much and many ,some and any**,** some apples, any grapes something, anyone, nobody, everywhere a few, a little, a lot of , **Articles**a shopkeeper, an old shop, the River Thames, He sells bread.. Stop and check 1 Teacher s Book
Week 5	Grammar, vocabulary and everyday English : **What do you Verb patterns 1,want to do?** **Future intentions** going to and will**,** Hot verbs, have, go, come have an accident go wrong come first
Week 6	Grammar, vocabulary and everyday English : **Tell me! What's it like? What's it like?** What's Paris like? **Comparative and superlative adjectives** big, bigger, biggest, good, better, best , Talking about towns, modern buildings, night-life /Money make money, inheri , Synonyms and antonyms, lovely, beautiful, interested, bored , Directions, farm, wood, pond opposite the car park
Week 7	Grammar, vocabulary and everyday English : **Present Perfect and Past Simple, for and since, Tense revision,** Past participles**,** Adverbs**,** Word pairs**,** this and that ladies and gentlemen , Short answers
Week 8	Grammar, vocabulary and everyday English : **Do's and don'ts have** (got) to, **Should, must,** Words that go together, Verb + complement, take responsibility, live abroad Compound nouns post office, headache .
Week 9	Grammar, vocabulary and everyday English : **Time and conditional clauses, What i f .**Hot verbs**,** take, get, do, make, take a photo, get angry, do me a favour
Week 10	Grammar, vocabulary and everyday English : Grammar **Verb patterns 2,** manage to do, used to do, go walking **Infinitives** Purpose**,** what, etc. + infinitive**,** I don't know what to say. something, etc. + infinitive everyday English Exclamations

Week 11	Grammar, vocabulary and everyday English : Verbs and past participles grown, produced Verbs and nouns that go together, tell a story, keep a promise p89 Notices, Keep off the grass, Out of order p
Week 12	Grammar, vocabulary and everyday English : **Dreams and Second conditional reality** *If I were a princess, I'd live In a castle.**migh t***Phrasal verbs /**Social expressions 2 *Congratulations!/Never mind./I haven't a clue.*
Week 13	Grammar, vocabulary and everyday English : **Present Perfect Continuous, Present Perfect Simple versus Continuous** Jobs and the alphabet game - *architect,* *Bookseller*
Week 14	Grammar, vocabulary and everyday English : Word formation**;** *death, die/variety, various* Adverbs/*mainly, possibly, exactly, carefully* p /Telephoning
Week 15	Grammar, vocabulary and everyday English : **Past Perfectl***They had met only one week earlier,* **Reported statements** Words in context pi 16 Saying goodbye;*Have a safe journey!*

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	New Headway . Oxford University press. 5th edition. Liz & John Soars • Stacey Hughes with photocopiable activities by Rachel Godfrey Pre-intermediate	yes
Recommended Texts	Michael Swan & Catherine Walter Oxford English Grammar Course	yes

	Basic A grammar practice book for elementary to pre-intermediate students of English	
Websites	chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://dl.avasshop.ir/headw/fifedition/book/head_prei_teachers_avasshop.pdf	