Ministry of Higher Education and Scientific Research Scientific Supervision and Scientific Evaluation Apparatus Directorate of Quality Assurance and Academic Accreditation Accreditation Department



Academic Program and Course Description

2024

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

<u>Academic Program Description</u>: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

<u>Course Description</u>: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

Program Objectives: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

<u>**Curriculum Structure:**</u> All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

Academic Program Description Form

University Name: University of Baghdad Faculty/Institute: Collage of Veterinary Medicine

Number of Scientific Department: 9

Academic or Professional Program Name: Bachelor of Surgery and Veterinary Medicine

Final Certificate Name Bachelor of Surgery and Veterinary Medicine Academic System: Terms Description Preparation Date: 11/4/2024 File Completion Date: 11/4/2024

the

Signature: Scientific Associate Name: Date: /4/2024

The file is checked by: Departmentof Quality Assurance and University Performance Director of the Quality Assurance and UniversityPerformance Department:

Date: 11/4/2024 Signature: Anothiker



Approval of the Dean

9. Aims of the Program.

1- The program established a set of academic standards that veterinary students should fulfill before their graduation. The aim of these standards is to ensure the acquirement of the minimum required professional skills by the students before their graduation.

2-The programme provides, in the early years, a broad-based knowledge and understanding of the range of Biomedical subjects.

3-The wide range of courses offered in the study years allows students to specialize in particular areas within a discipline or cover a broad curriculum.-

4- Most importantly courses are designed specifically around the research interests of the academic staff there by introducing some of the major biomedical and veterinary issues and controversies of the day.

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding A1.Knowlege of basic concepts in animal health and nutritional status of an animal and be able to advice on appropriate husbandry and feeding.

A2. Knowledge of basic concepts in animal production

A3. Knowledge of basic concepts in animal handling and restrain animals safely and humanely whilst ensuring

personal safety and that of others in the vicinity.

A4.Knowlege and familiarity with diseases diagnosis and treatment

A5.Knowlege and Familiarity with the practice of surgical and obstetric

A6. Familiarity with some moral values, social and religious

B. Subject-specific skills

B1. Communicate effectively with the public, professional colleagues and

appropriate authorities.

B2. Work in a professional manner with regard to the veterinarian's professional and legal responsibilities and understand and apply the ethical codes.

B3. Respond appropriately to the influence of economic and emotional

pressures

B4. Provide emergency care to all species of animals.

Teaching and Learning Methods

1-Establishment of a clear mission for each of the related clinical subjects.

2-Description of detailed course specification of each of the related clinical subjects with clear course contents, intended learning outcomes, methods of assessment, grading system and sources of teaching.

3-Description of recent methods teaching and student learning.

4-Description of methods of students' assessments in relation to the described intended learning outcomes.

Assessment methods

Examinations :-

Time Schedule

Grading system

Self-learning assignment

Evaluation of small group learning

C. Thinking Skills

C1. Thinking and problem-solving method of use

C2. The ability to achieve commitment and responsibility and leadership towards excellence and creativity in the field of profession

C3.the ability to perceive relationships and link them in different positions

Teaching and Learning Methods

1- Lectures

2-Practical sections

3-Field conveys

4-Samanarat

5-Discussion groups

6- Teamwork

Assessment methods :

1.Description of recent methods teaching and student learning.

2.Description of methods of students' assessments in relation to the described intended learning outcomes Short tests

3. Questions of dialogue and discussions within lectures

4. Assigning student research work related to the decision .

5. Try to know the student's mistakes and corrected him

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Acquire the skills to use laboratory equipment and pathological analyzes, Collect, preserve and transport samples; perform standard practice laboratory techniques; interpret laboratory results (and results of other ancillary diagnostic aids) and integrate with clinical information.

D2. Work effectively as a member of a multi disciplinary team in the delivery of services to clients and employers.

D3. The acquisition of skills in project management

D4. Demonstrate a practical ability to apply knowledge of disease processes within a clinical environment.

Teaching and Learning Methods

1. From an early stage, the concurrent demands of different components of the programme encourage the development of effective planning.

2. Assigning student research work related to the decision.

3.Try to know the student's mistakes and corrected him

4. Through engaging with the programme of work within the degree programme

Assessment Methods

Recognize their own limitations; recognize when to seek assistance and understand the protocols for dealing with second opinions.

Produce reports in a form that is satisfactory and understandable to the intended audience.

Examination of their respond appropriately to the influence of economic and emotional

pressures.						
11. Programme Strue	cture					
Level/Year	Course or Module Code	Course or Module Title	Credit rating	12. Awards and Credits		
First/2semester	Anatomy1/1	ANT	3	Bachelor Degree		
	Animal/1	ANM	3	Requires (218) credits		
	management	CHM140	4			
	Chemistry/1	1	1			
	Computer	СОМ	3			
	Biology/1	BIO	2			
	Democratic and	ENG	1			
	human	ANG	-			
	English language		-			
	Arabic Language					
	Anatomy1/2	ANM	2			
	Animal/2	CHM140	3			
	management	1	3			
	Chemistry/2	СОМ	4			
	Computer	BIO	1			
	Biology/2	ENG	3			
	Democratic and	ANG	2			
	human		1			

	English language		1
	Arabic Language		
Second /2semester	Anatomy2/1	ANT	3
	Histology/1	HIS	3
	Animal nutrition2/1	ANN	3
	Biochemistry/1	BCH240	4
	Physiology/1	2	5
	Genetics	PHY2502	2
	English Language	GEN	1
	Computer	ENG	1
		СОМ	
	Anatomy2/2		
	Histology/2		3
	Animal nutrition2/2	ANT	3
	Biochemistry/2	HIS	3
	Physiology/2	ANN	4
	Embryology	BCH240 2	5
	Statics	PHY2502	2
	English Language	EMB	1
	Computer	ST	1

		ENG	
		СОМ	
Third/2semester	Microbiology/1	MIC	4
	Pathology/1	PAT	4.5
	Parasitology/1	PAR	4
	Pharmacology/1	PHR340	4
	Immunology	2	3
	Toxicology	IMN	2
	English Language	TOX320 1	1
		ENG	
	Microbiology/1		4
	Pathology/1	MIC	4
	Parasitology/1	PAT	4
	Pharmacology/1	PAR	4
	Virology	PHR340	3
	Clinic	2	1
	English Language	IMN	1
		CLN	
		ENG	

Fourth/2semester	Surgery/1	SUR	3
	Poultry diseases/1	POU	3
	Clinical pathology/1	CLP	2
	Theriogenology	THE	3
	Medicine	MED	3
	Infectious diseases	INF	3
	&epidemiology	MLH	3
	Milk Health	CLN	2
	Clinic	ΡΑΤ	2
	Pathology anatomy/1	ENG	1
	English language		
	Surgery/2	SUR	3
	Poultry diseases/2	POU	3
	Clinical pathology/2	CLP	2
	Theriogenology	THE	3
	Medicine	MED	3
	Infectious diseases	INF	3
	&epidemiology	ZON	2
	Zoonatic diseases		
	Clinic	CLN	2
	Pathology anatomy/1	ΡΑΤ	2
	English language	ENG	1

	Clinic	CLN	7
	Veterinary public	VPH	3
	health	MED	3
	Medicine	FDS	3
	Fish diseases	OBS	2
	Obstetric	SUR	3
	Surgery	RES	1
	Research project	_	
	Clinic	CLN	6
Fifth/2semester	Reproduction		
	technologies	RT	2
	Veterinary public	VPH	2
	health	VPB	1
	Veterinary	MED	3
	professional behavior	FM	1
	Medicine	OBS	2
	Forensic medicine	SUR	3
	Obstetric	RES	1
	Surgery		
	Research project		

13. Personal Development Planning

Prepare a generation able to follow each new.

Conduct themselves in a professional manner with regard to the veterinarian's professional and legal responsibilities and understand and apply the ethical codes.

Foster and maintain a good professional relationship with clients and colleagues, developing mutual trust and respecting their professional views and confidentiality.

Personal development arises as a consequence of interactions with other students, staff and the students' academic advisors.

The ability to work in large or small groups and the collaborative skills required when working with unfamiliar colleagues is a feature of group work in some of the larger courses in earlier years.

14. Admission criteria .

According to central acceptance from Iraqi Ministry of Higher Education and Scientific Research.

15. Key sources of information about the programme

1- Establishment of a clear mission and vision for the faculty to ensure the main

objectives of the intended development programs

2-Description of detailed course specification of each of the related clinical subjects with clear course contents, intended learning outcomes, methods of assessment, grading system and sources of teaching.

3- Reference to the instructions regarding the University of Baghdad vocabulary curriculum and instruction exams

Course Description Form

1. Course Name:

Surgery -P1, P2, / obstetrics, female fertility, male fertility, reproductive technique.

Clinic

2. Course Code:

3. Semester / Year:

 $4^{th}, 5^{th}, / 4^{th}, 4^{th}, 5^{th}, 5^{th},$

Surgery $4^{\rm th}$ and $5^{\rm th}$ / obstetrics $4^{\rm th}$ and $5^{\rm th}$

4. Description Preparation Date:

5. Available Attendance Forms:

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

45hrs. theoretical +30hrs. Practical / 30hrs. Theoretical+ 30hrs. Practical/ 30hrs. Theoretical and 30hrs. practical

360 hrs. / Year clinic surgery + 360hrs. / Year clinic obstetrics.

7. Course administrator's name (mention all, if more than one name) Name: Hameed Ali Kadhim, Areej Kamel, Ahmed Hameed, Aseel Kamel, Eetlaf Al-Muthafer, Nadia Hameed

Talib Musa, Suhayla Onies, Saad Akram, Najlaa Sami, Nazeh Wais, Enas Ali,

Imad Majeed,

Email:

Enas.a@covm.uobaghdad.edu.iq

8. Course Objectives	
Course Objectives	Knowledge and Understanding
	SURGERY/ OBSTETRICS/ X RAY

0	Toost		ANESTHES SONAR/ LA LEARNING TREATMEN LEARNING INSEMINAT LEARNING TECHNIQUE	PAROSCOP OF BASIC V T OF DISEA OF ION R	
Strateç					
<u>10.</u> C Wee k	OURSE Hou rs	Structure Required Learning Outcomes	Unit or subject name	Learning method	Evaluatio n method
15	45hrs total	Surgery /P1 4th class Theoretical	 1-Introduction and classification of surgery 2-Sterilization (physical, chemical, modern technique for fertilization) 3-Shock and fluid therapy Wounds 4-Hemorrhage and hemostasis 5-Abscess, hematoma, cysts 6-Fistula, sinus, ulcer, gangrene Tumor, burn 7-Radiology: (definition, principle, properties, types, and factors affect X-Ray 8-Contrast radiology 9-Protection of X-Ray and hazards 10-Modern diagnostic aids: (CT scan, MRI, Ultrasound, digital X-Ray, Gamma camera). 11-Fractures: (definition, etiology, classification, treatment, fracture healing, 	Field and lab, Lectures	DAILY AND SEMESTER
15	30hrs	Surgery /P1	complication) 1- Introduction to surgical theater	Field and lab,	DAILY

	total	4th class	2- Sterilization	Lectures	AND
		Practical	 3- Surgical instruments 4- Pre-operative preparation 5- Suture and ligature (suture material 		SEMESTER
			and suture pattern)		
			6- X-Ray		
			7- Fracture		
15	45hrs	Surgery /P2	1- Anesthesia (detention and terms)	Field and lab,	
	total	4th class	2- Introduction of anesthesia, factors	lectures	
	total		affecting anesthesia		
		Theoretical	3- Pre-anesthesia4- Muscle relaxant		DAILY
			5- Local anesthesia		AND
			6- General anesthesia		SEMESTER
			7- Anesthetic accidents		
			8- Lameness		
			9- Laser surgery		
			10- Endoscopic and laparoscopic surgery		
15	30hrs	Surgery/P2	1- Local anesthesia	Field and lab,	
	total	4 th class	2- General anesthesia	Lectures	DAILY
	total	4 Class	3- Intra-articular injection		AND
		Practical	4- Tendon surgery		SEMESTER
			5- Laser and endoscopic surgery		
15	20hrs	Surgery/P1	6- Docking and dehorning1- Digestive system (Affections of	Field and lab,	DAILY
15	501115	Surgery/11	salivary glands and tongue)	i loid and ido,	AND
	total	5 th class	2- Affections of teeth	Lectures	SEMESTER
		Theoretical	3- Affections of soft and hard palate		SEMESTER
		Theoretical	4- Affections of pharynx		
			5- Affections of esophagus		
			6- Affections of simple stomach		
			7- Affections of large stomach		
			8- Affections of digestive accessory		
			organs		
			9- Hernia		
			10- Cardiovascular system		
			11- Ear surgery: ear hematoma, ear trimming		
			12- Eye surgery		
			13- Central nervus system		
			1- Digestive system: Extraction of teeth		
			2- Partial glossectomy		
			3- Esophgotomy		

15	30hrs total	Surgery/P2 5 th class Theoretical	 4- Gastrotomy 5- Pyloroplasty and pyloromyotomy 6- Enterotomy 7- Enterectomy 8- Rumenotomy 9- Partial and total splenectomy 10- Partial hepatectomy 11- Ear surgery 12- Ectropian and entropian 1- Respiratory system: Affection of nostrils and nasal cavity 2- Affection of sinuses and guttural pouch 	Field and lab, lectures	
			 3- Affection of larynx and trachea 4- Affection of lung 5- Affection of wall 6- Male genital system: affection of penis and prepuce Preparation of teaser, Castration 7- Female genital system: Ovariectomy and ovariohysterectomy, caesarian section, rectovaginal fistula, treatment of pneumo-vagina 8- Urinary system: Affection of kidney and ureter, Affection of urinary bladder, Affection of urethra 9- Mammary gland: Affection of mammary gland, teat surgery 		DAILY AND SEMESTER
15	30hrs total	Surgery/P2 5 th class Practical	 Respiratory system: Trephining Laryngectomy Tracheotomy Rib resection Thoracotomy Urinal system: Nephrectomy and nephrotomy Cystotomy and cystectomy Urethrostomy, urethrotomy, and urethral fistula Male genital system: Castration Penis surgery: circumcision, reefing operation, amputation of penis Female genital system: ovariectomy and ovariohysterectomy, caesarian 	Field and lab, lectures	DAILY AND SEMESTER

			section		
			12- Mammectomy		
			13- Teat fistula		
15	30hrs	Obstetrics /	1- Anatomy of the female genitalia	Field and lab,	
		Eomolo fortility /	2- Puberty and maturity	lectures	
	total	Female fertility /	3- Estrus cycle in animals	lectures	
		4 th class	4- Estrus detection		DAILY
		Theoretical	5- Seasonality and its effect on		
		Theoretical	reproduction		AND SEMESTER
		Obstetrics /	6- Reproductive hormones		SEIVIESTER
			7- Infertility and sterility		
			8- Reproduction in mare		
			9- Reproduction in buffalo and camels		
15	20hrc	Female fertility /	10- Reproduction in dogs and cats.	Field and lab,	
15	501115	remare returny /	 Anatomy of the animals' female genitalia 	Tield and lab,	
	total	4 th class	2- Examination of animal's female	lectures	
		Practical	genitalia		
			3- Measurements of animal's female		DAILY
			genitalia		AND
			4- Uses of reproduction hormones		SEMESTER
			5- Vaginal and uterine samples		
			6- Anomalies of animal's female		
			genitalia		
			7- Intrauterine therapy		
	0.01		8- Reproductive performance	F' 11 111	
15	30hrs	Obstetrics /	1- Maternal recognition of pregnancy	Field and lab,	
	total	Obstetrics 2nd S./	2- Factors effecting pregnancy period	lectures	
		class	(normal and abnormal) 3- Fetal membrane and its problems		DAULY
		Theoretical	4- Pregnancy problems		DAILY
		Theoretical	5- Signs of approaching parturition		AND
			6- Stages of parturition		SEMESTER
			7- Retention of fetal membranes		
			8- The puerperium period.		
			9- The puerperium period problems		
15	30hrs	Obstetrics /	1- The normal position of the fetus in	Field and lab,	DAILY
	+-+-1	Obstatution 2 - 14	the birth canal	lectures	AND
	total	Obstetrics 2nd S	2- Abnormal position of the fetus in the	10010105	SEMESTER
		4 th class	birth canal		
		Practical	3- Correction of abnormal fetal		
			positions		
			4- Causes of dystocia in animals		

[
			5- Forced extraction		
			6- Fetotomy		
			7- Cesarean section		
			8- Anatomical and histological division		
			of the embryonic membranes		
15	30hrs	Obstetrics / male		Field and lab,	
	total	fertility / 5 th clas	2- Hormonal control of male	lectures	
	total	Theoretical	reproductive system	lociales	
		i neor etteur	3- Spermatogenesis		
			4- Composition of semen		DAILY
			5- Sperm metabolism		
			6- Methods of semen collection		AND
			7- Methods of semen evaluation		SEMESTER
			8- Methods of semen dilution		
			9- Methods of semen storage		
			10- Artificial insemination and sperm		
			transport		
			11- Infertility in the male animals.		
15	30hrs	Obstetrics/male	1- Anatomy of male genital organs	Field and lab,	
		fertility / 5^{th} clas	2- Breeding soundness	lasturas	
	total	Practical	3- Semen collection	lectures	
		Plactical	4- Semen evaluation (Macroscopically,		
			volume, color)		
			5- Semen evaluation (Microscopically		DAILY
			mass and individual motility)		AND
			6- Semen evaluation (Dead, live, and		SEMESTER
			abnormal percentage)		020020120
			7- Semen dilution		
			8- Semen storage (Liquid)		
			9- Semen storage (Frozen)		
			10- Insemination techniques		
			11- Infertility in the male animals		
15	30hrs	Obstetrics/	1- Ultrasonography – general	Field and lab,	DAILY
	_	reproductive	information	1	AND
	total	technology/	2- Ultrasonography in large animals	lectures	SEMESTER
		class	3- Ultrasonography in small animals		
			4- Estrus synchronization in bovine		
		Theoretical	5- Estrus synchronization in ovine and		
			caprine		
			6- Controlling the age of puberty		
			7- Super ovulation		
			8- Embryo transfer		
			9- Laparoscopic intrauterine		

	1				
			insemination		
			10- Methods of oocyte collection and		
			maturation		
			11- Invitro fertilization		
			12- Sperm sexing		
			13- Cloning and splitting of embryo		
			14- Suppress of reproductive activity		
15	30hrs	Obstetrics/	1- Clinical application of	Field and lab,	
	_	reproductive	ultrasonography	1 /	
	total	technology/ 5 th	2- Estrus synchronization	lectures	
		class	3- Controlling the age of puberty		
			4- Super ovulation		
		Practical	5- Embryo transfer		DAILY
			6- Intrauterine insemination		AND
			7- Methods of oocyte collection and		SEMESTER
			maturation		
			8- Invitro fertilization		
			9- Sperm sexing (gender selection)		
			10- Cloning and splitting of embryo		
			11- Suppress of reproductive activity		
Distrib	outing t	the score out of	100 according to the tasks assigned to the	he student su	ch as daily
preparation, daily oral, monthly, or written exams, reports etc					

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	Books and thesis's
Recommended books and references (scientific journals, reports)	1. LECTURAL LECTURE
	2. FEMALE FERTILITY AND DIESESE
	3. MALE FERTILITY AND DISEASE
	4. ARTIFICIAL INSEMINATION
	5. REPRODUCTIVE AND OBETETRICS
	6. THESIS AND DESERTATIONS
	7. ANIMALS SURGERY
Electronic References, Websites	Scientific web sites

Course Description Form

13.Course Name:	
2.Course Code:	
1. pathology /third class (pathology)	
2. poultry disease/fourth class (poult.)	
3.fish disease/fifth class (fish)	
4.Morbidity	
5Morbid Anatomy-	
5-Forensic medicine	

14.Semester / Year:

15.Description Preparation Date:

16. Available Attendance Forms:

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

1. pathology /third class (pathology)

2. hours theoretical/week, 2 hours

practical/week

2. poultry disease/fourth class (poult.)

2 hours theoretical/week, 2 hours

practical/week

3. fish disease/fifth class (fish) one semesters/year

2 hours theoretical/week, 2 hours

practical/week

- 4. Forensic medicine
- 5-morbid 1 hours theoretical/week, 2 hours

practical/week

18.0	Course	administrator's nam	ne (mention all, if mo	re than one na	ime)		
נ	Name:						
]	Email:						
10.4		01:					
19.0 Course		Objectives	Study di	ifferent animal di	seases		
	U		Improve		to deal with different		
			• Use scie	entific approaches	s to identify, diagnose,		
20	Teachi	ng and Learning Str		t infected animal	S.		
Strategy		<u></u>					
	T	Jsing multi scientifi	c methods such as the	eoretical and h	aboratory tools		
		-	vebsites to present cli				
21. Co			, Morbid Anatomy, a				
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation method		
		Outcomes		method			
1	1	3 rd year Pathology	Introduction to pathology:				
			Definition and terms in				
			pathology				
			Cell injury:				
			Causes of cell injury:	Theoretical			
			reversible and irreversible and cellular	lecture	Written examination		
			adaptation.				
2	1		Cell injury Degeneration and types	Theoretical lecture	Written examination		
			of degeneration:				
			1-acute cell swelling degeneration				

		Hyperemia and		
6	1	Disturbance of circulation	Theoretical lecture	Written examination
		Gout		
		Calcification		
		Mineralization	lecture	Written examination
		endogenous and exogenous pigments	Theoretical	Writton anomination
		Types of pigments:		
5	1	Pigmentation:		
		pathology, morphology and microscopic		
		Mechanisms and		
		Apoptosis:	lecture	
		Sequel of necrosis and gangrene	Theoretical	Written examination
		of necrosis		
	1	Mechanisms and types		
4	1	appearance Necrosis and apoptosis:		
		-gross and microscopic		
		-Pathogenesis		
		nature and classification of Amyloid	Theoretical lecture	Written examination
		- Origin, chemical		
		- Definition of Amyloid		
3	1	Amyloidosis:		
		5-Fibrinoid degeneration		
		4-Hyaline degeneration		
		3-Fatty degeneration		
		2-hydropic (vacuolar) degeneration		

		· ·		
		congestion		
		Edema		
		Thrombus and embolism		
		Atherosclerosis		
		Shock		
7	1	Disturbance of growth		
		Atrophy, Hypoplasia		
		Hypertrophy, Hyperplasia	Theoretical	Written examination
		Metaplasia	lecture	written examination
		,Anomalies and transformations		
	1	Mid-Term Examination 8 th week		Written examination
8	1	Inflammation		
		Pathogenesis of inflammation		
		Stages of inflammatory responses		
		1- Acute inflammatory response	Theorem	
		Chemical mediators in inflammation,	Theoretical lecture	Written examination
		Types of inflammatory cells and exudates (catarrhal, mucinous, fibrinous, suppurative (purulent),		
9	1	2- Chronic inflammatory response	Theoretical lecture	Written examination

			Pathogenesis		
			Types of chronic inflammatory cells		
			Types of exudates		
			Granulomatous inflammatory response		
10	1		Fate of chronic inflammation		
			Healing and repair	Theoretical	Written examination
			granulation tissue and fibrous connective tissue	lecture	
11	2		Immunopathology		
			General features of immune system		
			Innate immunity (nonspecific immunity)	Theoretical lecture	Written examination
			Adaptive immunity (specific immunity)		
			Disorders of immune system		
12	2		Neoplasia and Tumor biology/ Part one		
			Definition, nomenclature,	Theoretical lecture	Written examination
			Tumor characterization (benign and malignant tumors)		
13	1		Neoplasia and Tumor biology/ Part two		
			Carcinogenesis	Theoretical lecture	Written examination
			Tumor spread		
		4 th class Morbid Anatomy			

1	1	TB, Leptospirosis	Theoretical lecture	Written examination
2	1	Actinomycosis and Actinobacillosis	Theoretical lecture	Written examination
3	1	Colibacillosis, CBPP	Theoretical lecture	Written examination
4	1	FMD	Theoretical lecture	Written examination
5	1	Listeriosis	Theoretical lecture	Written examination
6	1	Sheep Pox	Theoretical lecture	Written examination
7	1	Contagious acthyma	Theoretical lecture	Written examination
8	1	Black disease	Theoretical lecture	Written examination
9	1	Black leg disease	Theoretical lecture	Written examination
10	1	Anthrax	Theoretical lecture	Written examination
11	1	Brucellosis	Theoretical lecture	Written examination
12	1	Malignant catarrhal diarrhea	Theoretical lecture	Written examination
13	1	Babesiosis	Theoretical lecture	Written examination
14	1	Anaplasmosis	Theoretical lecture	Written examination
1	2	Post mortem necropsy for large animal	Practical lecture	Slide examination
2	2	Post mortem necropsy for small animal	Practical lecture	Slide examination
3	2	slides for TB,Leptospirosis	Practical lecture	Slide examination

	•	1	01:1 0		
4	2		Slides for Actinomycosis and actinobacillosis	Practical lecture	Slide examination
5	2		Slides for Colibacillosis ,CBPP	Practical lecture	Slide examination
6	2		Slides for FMD	Practical lecture	Slide examination
7	2		Slides for Listeriosis	Practical lecture	Slide examination
8	2		Slides for Sheep Pox	Practical lecture	Slide examination
9	2		Slides for Contagious Ecthyma	Practical lecture	Slide examination
10	2		Slides for Black disease	Practical lecture	Slide examination
11	2		Slides for Black leg disease	Practical lecture	Slide examination
12	2		Slides for Anthrax	Practical lecture	Slide examination
13	2		Slides for Brucellosis	Practical lecture	Slide examination
14	2		Slides for Malignant catarrhal diarrhea, Babesiosis	Practical lecture	Slide examination
15	2		Slides for Anaplasmosis, Theileriosis	Practical lecture	Slide examination
		4 th year poultry disea	ses		
1-2	4		Gumboro Disease Newcastle Disease Avian influenza	Theoretical lecture	Written examination
3-4	4		MareksDisease Lymphoid leukosis Avian encephalomyelitis Infectious stunting syndrome	Theoretical lecture	Written examination
5-6-7	4		Pox Disease Adeno virus diseases (EDS,HHS,IBH) CIA	Theoretical lecture	Written examination
8	2		Semester Exam	Theoretical lecture	Written examination
9-10	4		Infectious Bronchitis	Theoretical	Written examination

			ILT Duck viral hepatitis	lecture	
11-12- 13	6		Mycoplasma diseases Fowl cholera disease Infectious coryza disease	Theoretical lecture	Written examination
1	4		Poultry house Cleaning and disinfection poultry house	Practical lecture	Written examination
2	8		Anatomy and examination Case history	Practical lecture	Written examination
3	8		Vaccination program Poultry nutrition	Practical lecture	Written examination
4	8		Newcastle Disease Avian influenza	Practical lecture	Written examination
5	8		Gumboro Disease Viral arthritis	Practical lecture	Written examination
6	8		MareksDisease Lymphoid leukosis	Practical lecture	Written examination
7	8		Avian encephalomyelitis Infectious stunting syndrome	Practical lecture	Written examination
8	8		Pox Disease CIA	Practical lecture	Written examination
9	8		Adeno virus diseases (EDS,HHS,IBH)	Practical lecture	Written examination
10	8		Semester Exam	Practical lecture	Written examination
11			Infectious Bronchitis ILT Duck viral hepatitis	Practical lecture	Written examination
12	8		Mycoplasma diseases	Practical lecture	Written examination
13	8		Fowl cholera disease Infectious coryza disease	Practical lecture	Written examination
		valuation	g to the tasks assigned to the	he student such as	daily preparation daily
	-	vritten exams, reports		ne student such as	aany proparation, dally

23.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Pathologic basis of Vet. Diseases,
	Poultry Diseases (David Swayne),
	Fish Disease: Diagnosis and Treatment (Edward Noga)
Main references (sources)	Pathology of Domestic Animals, Pathologic basis of Vet. Diseases
Recommended books and references (scientific journals, reports)	Avian Histopathology, Vet. Immunology
Electronic References, Websites	https://vetpath.wordpress.com/ about/
	https://www.msd-animal- health.ie/species/horses/strangles/

Course Description Form

24.	Course Name:veterinary parasitology
25.	Course Code:

	Semester D / MSc st		rad)3 rd year vet s	chool studen	ts/(grad students
27.	Description	n Preparation Dat	e:		
28./	Available A	ttendance Forms:			
		Credit Hours (Tota program (90hrs)	l) / Number of Units / PhD () MSc ()	s (Total)	
30.			s name (mention a boubi (Assistance)		,
31.		sul@covm.uobag	hdad.edu.iq		
_	Objectives	Iden Imp	tify the types of parasite rove students' ability to uce losses resulting fro rol.	diagnose and clir	Ū.
32. Strateg	У	ching and Learnir	ng Strategies d practice as well as	media in diag	rams , films
33. Co Week	ourse Stru Hours	cture (post-gradu Required Learning Outcomes	uate programs) Unit or subject name	Learning method	Evaluation method
1-4 5-8	12 12	Parasitology Parasitology	Trematoda Cestode	Lectures Lectures	Exams Short Oc
9-15	21	Parasitology	Nematoda	Lectures Lectures	Short Qs Homework
16-23	24	Parasitology	Protozoa	Lectures	
24-30	21	Parasitology	Arthropoda		

34. Course Evaluation

Annualevaluation through courses outcomes and students' results and lecturer success rates in thestudent faculty evaluations

35. Learning and Teaching Resource	S
COURSE MATERIALS	Soulsby (1982)
Special requirements (include for exam workshops, periodicals, IT software, websites)	
Community-based facilities	Vet. Parasitol. J, Parasitology ReS. j
Guest Lectures , internship , field studies)	CDC. Web.

Course Description Form

36.	Course Name:
Veterinary	public health
37.	Course Code:
38. stud	Semester / Year: (under grad)1,2,5 th year vet school students/(gr <mark>ad</mark> ents)PhD / MSc students
39.	Description Preparation Date:
40.Avail	able Attendance Forms:
41.Num	ber of Credit Hours (Total) / Number of Units (Total)
Unde	ergraduate program (120hrs) / PhD () MSc ()
42. nam	Course administrator's name (mention all, if more than one e)
Nam	e: Dr. Jassim Edan Qasim (Assistance of department head)

43.	C Objectiv	ourse Objectives	, 		the animal
44. Strateg	- T	eaching and Lear	rning Strategies	-	and nutrition tudents' ability to bod hygiene ntamination and
45. Co	ourse S	tructure			
Week	Hour s	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-4	12	Public health	Animal and poul	tıfyectures	Exams
			Animal and poul management.	Lectures	
5-8	12	Public health	-	Lectures Lectures	Short Qs
5-8 9-15	12 21		management . Animal nutrition	Lectures Lectures Lectures	
	12	Public health	management . Animal nutrition Food hyagiene	Lectures Lectures Lectures Lectures	Short Qs
5-8 9-15	12 21 24	Public health	management . Animal nutrition	Lectures Lectures Lectures Lectures	Short Qs
5-8 9-15 16-23 24-30 46. (Annual e	12 21 24 Course	Public health Public health 2 Public health Public health Public health Public health Evaluation	management . Animal nutrition Food hyagiene Milk and meato	Lectures Lectures Lectures Cu	Short Qs Homewo
5-8 9-15 16-23 24-30 46. (Annual e student	12 21 24 Course evaluation faculty ev	Public health Public health 2 Public health Public health Public health Public health Evaluation through courses outco aluations	management . Animal nutrition Food hyagiene Milk and meato hyagiene	Lectures Lectures Lectures Cu	Short Qs Homewo

websites)	McDonald Book ,2019
Community-based facilities	Vet Book, Animal Management 2023
Guest Lectures , internship , field studies)	Text book of milk hygiene 2014
Special requirements (include for examp workshops, periodicals, IT softwa websites)	

48.	Course Name:
Anatomy	
49.	Course Code:
ANAT. I:	
50.	Semester / Year:
Year:2024	
51.	Description Preparation Date:
2024	
52.Avail	able Attendance Forms:
53.Num	ber of Credit Hours (Total) / Number of Units (Total)
4 Nu	mber of Units (Total)081 ,theotrical 4.practical 1
54.	Course administrator's name (mention all, if more than one
nam	e)

Name: dr.Hadaf Hashem Mohammed					
Email:hadaf.hm@covm.uobaghdad.edu.iq					
	uunq				
55. Course Objectives					
Course Objectives	The student will have a comprehensive knowledge and understanding on				
	normal structure of the organs and body systems				
	A2. The student will have a comprehensive knowledge and understanding on				
	normal microscopic structure of the organs and body systems				
	A3. The student will have a comprehensive knowledge and understanding on				
	normal developmental events occurred in the organs and body systems				
	•				
	•				
56. Teaching and Learning Strate	egies				
Strategy					
The practical lab portion of t exercises and skill in	hese courses will emphasize introductory				
identifying normal morphology of the different body organs at both macro and microscopic					
levels					

57. Cou Week	Irse Structu Hours	re Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
15	1 4 wee y 180 hour	Introduction,	Theoretical lecture	Lectures	Written examination
		General Osteology,	Theoretical lecture	Lectures	Written examination
		Myology:	Theoretical lecture	Lectures	Written examination
		General Syndesmology (arthrology):	Theoretical lecture	Lectures	Written examination
		Common integument	Theoretical lecture	Lectures	Written examination
		Cardiovascular system (heart & arteries):	Theoretical lecture	Lectures	Written examination
		Mammary gland:	Theoretical lecture	Lectures	Written examination
		Urinary system			Written examination
		General Syndesmology (arthrology):			=
		Common integument			=

المقادمة المحافظ		
Introduction,		=
General Osteology,		=
Myology:		
General		
Syndesmology		
(arthrology):		
Common		
integument		
Endocrine gland		
Bones of thoracic		
limb &joints,		
scapula of horse		Spot
& comparative		examination
anatomy		
anatomy		
Humerus&		
comparative		
anatomy		
Radius & ulna		
with comparison		
Carpal,		
metacarpal &		
phalanges in		
horse		
Circulatory		
Circulatory		
system:		
pericardium,		

[]			1
	heart, chambers		
	of heart, major		
	vessels of the		
	heart		
	Endocrine gland		
	Bones of thoracic		
	limb &joints,		
	scapula of horse		
	& comparative		
	anatomy		
	Humerus&		
	comparative		
	anatomy		
	Muscles of the		
	shoulder girdle of		
	the sheep		
	Lateral surface of		
	shoulder & arm		
	muscles in sheep		
	Dissection of		
	intrinsic muscles		
	of shoulder & arm		
	Muscles of the		
	forearm & manus		
	(extensor &		
	flexor)		
	(iexor)		
	Arteries & nerves		
	of the thoracic		
	limb in sheep		
	Thoracic &		
	lumbar		
	vertebrae,		
	sacrum in horse		
	Ribs & sternum in		
· · · · · · · · · · · · · · · · · · ·			

		horse					
		Arteries & nerves of the thoracic limb in sheep					
		Arteries & nerves of the thoracic limb in sheep					
		Thoracic & lumbar vertebrae, sacrum in horse					
58. Cou	ırse Evalu	ation					
Examination	n:1-						
Written mid							
Written fina	al –term						
Practical fin	al –term						
59. Lea	rning and	Teaching Resou	irces				
Required te	extbooks (cu	urricular books, if ar	ny)	. Course Not	es (by staff men	nbers)	
				2.Dellmann, Veterinary	H. D. 1998. Text	book of:	
				Histology. and	5th Ed. Lippinco	ott, Williams	
				Wilkins, U	SA. (HIST)		
				3. Bacha, W. Color Atlas o	J. and L. M. Back f	ha. 2000.	
				Veterinary H and	istology, Lippind	cott William	
				Wilkins, U	SA. (HIST)		

4. Lee and Febiger, Banks, W.J., 1992.
Applied
Veterinary Histology. (3rd Ed). Williams and
Willkins, Baltimore. (HIST)
5. Veterinary Developmental Anatomy- Veterinary
Embryology, 2011 . (EMB)
6. langman's medical embryology 9th ed.
(EMB)
7. A Text Book of Veterinary Anatomy By Robert Getty. (ANAT . I, ANAT . II)
Google scolar

60.	Course Name: physiology
61.	Course Code:Animal physiology / PHY2502
62.	Semester / Year:2024
63.	Description Preparation Date:2024
64.Avai	ilable Attendance Forms:

65.Number of Credit Hours (Total) /4 Number of Units (Total) 180,theotrical 4.practical 1

66. Course administrator's name (mention all, if more than one name) Name: dr. Hassan k. algataa

Email:

67. Course Objectives

Course ObjectivesThis course is designed so that the student of second year will achieve a general understanding about:-.

- normal functions of different systems in mammals and poultry

Normal behavior of animals

knowledge and understanding of the normal physiological basis of organ function and homeostasis

The laboratory portion of this course will emphasize introductory exercises, experimental techniques, and data collection of physiological variables.

68.	Teac	hing and Learning Strategies
Strategy		
		A- Knowledge and Understanding
		A1.The student will have a comprehensive knowledge and un normal functions of cell organelles
		A2.Functions of different body systems and interaction betwee different physiological conditions
		A3. Knowledge about the interaction between body systems ophysiological conditions
		A4. The interaction responses between different body systems non physiological conditions
		A5Know the type and methods of completion .Laboratory tests fo

		systems A6 .How to read and analyze th	ie laboratory tes	sts results	
60 (Structure			
69. C Wee	Hourse S		Unit or subject	Learning	Evaluatio
k	Hours		name	method	method
15	4 weekly 180 hour	functions(Organization ^{rs} ofthecell,membranousstructuresofthecell,cytoplasman tsorganellesfunctionalsystemsofthecell,Transportofsubs	eral con, tile on, cole or Cardiovascular System	Oral Examination Examinati on daily evaluation 3- Reports writing	Gui

ion of the blood vessels, cardiac innervation, vasomoto center, baroreceptors and blood _brain barrier)	or	
Blood (formed elements, functions of the blo erythrocytes, erythropoiesis, hemoglobin, reactions hemoglobin, wh bloodcells,chemotaxis,platelets,plasmaproteins,bloo coagulation, blood groups, immunity	s of nite	
Structures offemalereproductivesystem,typesoffollicles,estrous cle, menstrual cycle, ovarian cycle, uterine cy vaginal cycle, puberty, ovarian hormon abnormalities of ovarian functions. Pregnan placental hormones, parturition and lactation	cle, nes,	
Digestive system: salivary glands and sal structures of digest system,gastricsecretion,regulationofgastric secreti exocrineportionofthepancreas,liverandbiliarysyster mall intestine,intestinalsecretion,intestinalmotility,large estine,	ion, n,sDigestive system	
Kidney:nephron structure and blood supply,plasmavolume,totalbloodvolume,glomerul arfiltration,factorsaffectingtheGFR, tubular function, tubular secretion, water excretion, osmotic diuresis,diuretics, factors affecting sodium excretion,regulationofpotassiumexcretion,functio nsofureterandurinarybladder	Renal system	
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, 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	Respiratory system	
	Endocrine system:the relationship between nervous systemandendocrineglands,hormones,typesofhor mones,mechanismsof hormone action, pituitary gland, thyroid gland,hormonal control of calcium metabolism, parathyroid glands, adrenal gland, pancreatic hormones,prostagandins, atrial natriuretic peptide, pineal gland and thymus gland	Endocrinology Male	
	Male and female reproductive system: structures, spermatogenesis, structure of mature spermatozoon, endocrine function of the testes and control of testicular function		
70. Course Ev		reproductive system	

70. Course Evaluation

Examination:1-

Written mid-term	
Written final –term	
Practical final –term	
Oral Examination	
Course assessment weight for annual system (100%)	
71. Learning and Teaching Resources Using recent illustrating tools for teaching and scientific films . Perform oral	examinations and scientific disc
Required textbooks (curricular books, if any)	Ganong
Main references (sources)	gyton
Recommended books and references (scientific journals, reports)	breazil
Electronic References, Websites	Google scolar
	0

Biochemistry

72.	Course Name: biochemistry
73.	Course Code:biochemistry / BCH 2 402
74.	Semester / Year:2024
75.	Description Preparation Date:2024
76.Avail	lable Attendance Forms:
	ber of Credit Hours (Total) /4 Number of Units (Total)150 hours ,theatrical
3,pra	actical 1
78.	Course administrator's name (mention all, if more than one name)
Nam	ne: dr. Luma walled
Ema	il:
70	
79. Course Obi	Course Objectives
	Course Objectives ectivesThis course is designed so that the
student of	ectivesThis course is designed so that the second year will achieve a general
-	ectivesThis course is designed so that the second year will achieve a general
student of	ectivesThis course is designed so that the second year will achieve a general
student of understandi	ectivesThis course is designed so that the second year will achieve a general
student of understandi - normal fur poultry	ectivesThis course is designed so that the second year will achieve a general ing about: •
student of understandi - normal fur poultry Normal beha knowledge	ectivesThis course is designed so that the second year will achieve a general ing about: •

data c	· –	-					
80 Strate		eaching	and Learning St	rategies			
	37						
			A- Knowledg	e and Underst	tanding		
			A1.The student understanding o		-		wledge
			A2.Functions of them during diff				ion betw
			A3. Knowledge a different physic			ween body sys	stems du
			A4. The interac during different	-			ody syst
			A5Know the typ	e and metho	ds of compl	ation Laborat	toru toot
			different body sy				lory tests
				ystems	-		-
04 0			different body s	ystems	-		-
	Course S		different body sy A6 .How to read	ystems and analyze	the laborato	ory tests resul	-
Wee	Course S Hours		different body sy A6 .How to read	ystems	-		-
Wee k		Require Outcom	different body sy A6 .How to read	ystems and analyze Unit or subject	the laborato	ory tests resul	-
Wee k	Hours 4 weekly	Require Outcom Cell bioch sEnzyme :	different body sy A6 .How to read	ystems and analyze Unit or subject name	the laborato	ory tests result Evaluation method	-
Wee k	Hours 4 weekly	Require Outcom Cell bioch sEnzyme : action, ki Hormone	different body sy A6 .How to read ed Learning hemistry mechanism of	ystems and analyze and analyze	the laborato	ory tests result Evaluation method	-
Wee k	Hours 4 weekly	Require Outcom Cell bioch sEnzyme : action, ki Hormone ,signal tra	different body sy A6 .How to read ed Learning nes nemistry mechanism of netic, regulation es: hormone action	ystems and analyze and analyze	the laborato	ory tests result Evaluation method	-
81. C Wee k	Hours 4 weekly	Require Outcom Cell bioch s Enzyme : action, ki Hormone ,signal tra CHO-biol	different body sy A6 .How to read A6 .How to read ed Learning nes hemistry mechanism of netic, regulation es: hormone action ansduction	ystems and analyze and analyze	the laborato Learning method Oral Examination	ory tests result Evaluation method	-

		1
Glycogenesis, Glycoge	nolysis Of optimum Ph	
oxidative	and	
phosphorylationrespi	ration temperature	
phosphorylationrespi	of α -amylase	
Lipid storage	enzyme	
	Urine sample	
2nd semestar	analysis	
Lipids : oxidation of fa		
,ketogenesis ,biosynth		
fatty acids	constituents	
Cholesterol synthesis	of urine	
,transport & excretion	Unknown of	
, transport & excretion	urine	
Regulation og gene		
expression		
Anabolism & catabolis		
protein & amino acids	Photometric	
Nucleotides & nucleic		
structure & function	biochemical	
	analysis	
Metabolism of nucleo	tides	
RNA synthesis proces	Determination	
,modification	of serum total	
, inouncation	protein	
Mid. Term examination		
	Determination	
DNA organization rep		
& repair. Protein synt	, , , , , , , , , , , , , , , , , , , ,	
the genetic code.	activity	
Proteinsynthesis and	gene Determination	
code	of serum total	
	calcium	
exam		
	Determination	
	of serum	
	creatinine	
	Determination	
	Determination	
	of serum uric	
	acid and urea	
	Determination	
	of serum	

				 	_
			bilirubin		
			Examination		
			Separation of		
			lipids from phospholipids		
			Determination of serum		
			cholesterol		
			Enzymatic		
			method for		
			glucose		
			Determination		
			of serum total lipid		
82. Cou	urse Eva	luation			
Examinat					
Written r	nid-term	l			
Written f	final –teri	m			
Practical	final –tei	rm			
Oral Exar	mination				

Course assessment weight for annual system (100%)					
83. Learning and Teaching Resources Using recent illustrating tools for teaching and scientific films . Perform oral examinations and scientific discussion					
Required textbooks (curricular books, if any)	Harper`s illustrated biochemistry; Murray et al Biochemistry – An Introduction Mckee and Mck ee				
Main references (sources)	Laboratory devices &equipments Data show, Screen, new references in librar				
Recommended books and references (scientific journals, reports)					
Electronic References, Websites	Google scolar				

 r
l

General chemistry

84.	Course Name: General chemistry
85.	Course Code: General chemistry / CHM1401
	57
86.	Semester / Year:2024
87.	Description Preparation Date:2024
88.Availa	able Attendance Forms:
89.Numb	per of Credit Hours (Total) /4 Number of Units (Total)75, theatrical 3, practical 1
90.	Course administrator's name (mention all, if more than one name)
	e: dr. Mohandabd- al latef
Emai	1:
91.	Course Objectives
	ctivesThis course is designed so that the
	second year will achieve a general
understandin	
- normal fun poultry	ctions of different systems in mammals and
Normal beha	vior of animals
knowledge	and understanding of the normal

	biogioui a	asis of organ function and ho	omeostasis						
introd	uctory ex	portion of this course w kercises, experimental tech of physiological variables.							
92. Teaching and Learning Strategies									
Strate	gу								
		A- Knowledg	e and Understa	anding					
		A1.The student understanding o		_		vledge a			
		A2.Functions of them during diff		5 5		on betw			
		A3. Knowledge different physio			veen body syst	tems dur			
		A4. The interac during different	-			dy syste			
		A5Know the typ different body sy		ls of comple	etion .Laborato	ory tests			
			ystems	-		-			
93. C	Course S	different body sy A6 .How to read	ystems	-		-			
Wee	Course S	different body sy A6 .How to read	ystems	-		-			
Wee k		different body sy A6 .How to read tructure Required Learning Outcomes	ystems and analyze the Unit or subject name Qualitative analysis of	he laborator	Ty tests results	-			
Wee k	Hours	different body sy A6 .How to read	ystems and analyze the Unit or subject name Qualitative analysis of cations Types of chemical	he laborator Learning method Oral	Ty tests results	-			
Wee k	Hours	different body sy A6 .How to read tructure Required Learning Outcomes Atom and electronic structure Types of chemical bonds Acid – Base theory	ystems and analyze the Unit or subject name Qualitative analysis of cations Types of chemical bonds	he laborator Learning method Oral Examination	Ty tests results	-			
93. C Wee k	Hours	different body sy A6 .How to read	ystems and analyze the Unit or subject name Qualitative analysis of cations Types of chemical bonds Analysis of a	he laborator Learning method Oral Examination	Ty tests results	-			
Wee k	Hours	different body sy A6 .How to read tructure Required Learning Outcomes Atom and electronic structure Types of chemical bonds Acid – Base theory	ystems and analyze the Unit or subject name Qualitative analysis of cations Types of chemical bonds	he laborator Learning method Oral Examination	Ty tests results	-			

Aromatic compounds	Base theory	2 D	
Mid. Term examination	Tituation of	3- Reports writing	
Mid. Term examination	Titration of strong acid with	witting	
Buffer	strong base		
Organishalidaa Alaahala and	Sti Olig Dase		
Organichalides, Alcohols and phenols	Formula masses		
phenois			
Aldehydes and ketones	Analysis of		
Carbourdia acida	amixture of		
Carboxylic acids	NaOHand		
Anhydrides, esters, and	Na2CO3		
amides of carboxylic acids	Organic		
Introduction of	chemistry		
biochemistry	Standardization		
sidenenniser y	of HCl solution		
	with standard		
	solution of		
	Na2CO3		
	Alkenes		
	and alkynes		
	Aromatic		
	compounds		
	Mid.		
	Term		
	examination		
	Determination		
	of Fe in FeSO4		
	Solution		
	Buffer		
	Determination		
	of normality of		
	KMnO4 solution		
	Organichalides,		
	Alcohols and		
	phenols		
	Precipitation,		
	titration :		
	Determenation		
	of chloride by		
	mohr method		

			1	1	1	-
			Aldehydes and			
			ketones			
			Determination			
			of the strengthvolume			
			of H2O2			
			solution			
			Carboxylic acids			
			Standardization			
			of NaS2O3			
			solution			
			Anhydrides,			
			esters, and			
			amides of			
			carboxylic acids			
04.0	ourse Eva					
94.0		aluation				
	nation:1-					
Written	n mid-tern	n				
Written	n final –ter	m				
Practic	al final –te	erm				
Oral Ex	amination	1				

Course assessment weigh	t for annual system (100%)	
Perform oral exami	ating tools for teaching and scientific films . nations and scientific discussion	
Required textbo (curricular books, if any)	students of biology and medicine , G . A. Taylor General chemistry , Ebbing	
Main references (sources	5)	
Recommended books and references (scientific journals, reports)	Chemistry of organic compounds , noller 3rd . Edition An introduction chemical analysis walter E. Han , Byron Kratochvil , 1982	to rris
Electronic Referenc	e Google scolar	

Websites	

pharmacology

06	Course Nemenharmeeology
96.	Course Name:pharmacology
97.	Course Code:Pharmacology/ PHR3402
01.	
98.	Semester / Year:2024
99.	Description Preparation Date:2024
100.	Available Attendance Forms:
100.	
101.	Number of Credit Hours (Total) /4 Number of Units (Total) 150 hours theatrical
3, p	ractical 1
102.	Course administrator's name (mention all, if more than one name)
-	ne: dr. Auorobamohammed
Ema	ail:
103.	Course Objectives
	bjectivesThis course is designed so that the
	of second year will achieve a general
understand	ling about: • ·····
- normal fu	unctions of different systems in mammals and
poultry	
Normal beh	navior of animals
knowledge	and understanding of the normal physiological
-	gan function and homeostasis
The labora	atory portion of this course will emphasize

1) Strate		eaching and Learning St	rategies			
	97					
		A- Knowledge	e and Understand	ding		
		A1.The student understanding of	t will have a n normal functio	-		vledge
A2.Functions of different body systems and interaction be during different physiological conditions						twee
A3. Knowledge about the interaction between body syst different physiological conditions					een body syst	tems
A4. The interaction responses between different body sys different non physiological conditions						tems
		A5Know the typ	of complet	tion .Laborato	ory te	
		different body sy	vstems			
				laboratory t	tests results	
		different body sy A6 .How to read		laboratory t	tests results	
				laboratory t	tests results	
				laboratory t	tests results	
105	Course	A6 .How to read		laboratory t	tests results	
		A6 .How to read Structure	and analyze the		tests results Evaluation	
Nee	Course Hours	A6 .How to read		laboratory t Learning method		
Wee k		A6 .How to read Structure Required Learning Outcomes	and analyze the Unit or subject	Learning	Evaluation	
Wee k	Hours	A6 .How to read Structure Required Learning Outcomes First semester	and analyze the Unit or subject name	Learning method	Evaluation method	
Wee k	Hours	A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular	and analyze the Unit or subject name Principles of pharmacology	Learning method Oral	Evaluation method	
Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood	and analyze the Unit or subject name Principles of	Learning method Oral	Evaluation method	
Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood Chemotherapy of microbial	and analyze the Unit or subject name Principles of pharmacology Pharmacokinetics	Learning method Oral	Evaluation method	
Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood	and analyze the Unit or subject name Principles of pharmacology Pharmacokinetics - Drug-Receptor	Learning method Oral	Evaluation method	
Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood Chemotherapy of microbial	and analyze the Unit or subject name Principles of pharmacology Pharmacokinetics - Drug-Receptor Interaction and Pharmacodynamic s	Learning method Oral Examination Examinatio n	Evaluation method	
Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood Chemotherapy of microbial diseases Chemotherapy of parasitic disease	and analyze the Unit or subject name Principles of pharmacology Pharmacokinetics - Drug-Receptor Interaction and Pharmacodynamic s Drugs acting on	Learning method Oral Examination Examinatio n daily	Evaluation method	
Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood Chemotherapy of microbial diseases Chemotherapy of parasitic disease Autacoids and anti-	and analyze the Unit or subject name Principles of pharmacology Pharmacokinetics - Drug-Receptor Interaction and Pharmacodynamic s	Learning method Oral Examination Examination n daily evaluation	Evaluation method	
105. Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood Chemotherapy of microbial diseases Chemotherapy of parasitic disease Autacoids and anti- inflammatory drugs	and analyze the Unit or subject name Principles of pharmacology Pharmacokinetics - Drug-Receptor Interaction and Pharmacodynamic s Drugs acting on autonomic and	Learning method Oral Examination Examination n daily evaluation 3- Reports	Evaluation method	
Wee k	Hours	A6 .How to read A6 .How to read Structure Required Learning Outcomes First semester Drug acting on cardiovascular system and blood Chemotherapy of microbial diseases Chemotherapy of parasitic disease Autacoids and anti-	and analyze the Unit or subject name Principles of pharmacology Pharmacokinetics - Drug-Receptor Interaction and Pharmacodynamic s Drugs acting on autonomic and somatic nervous	Learning method Oral Examination Examination n daily evaluation	Evaluation method	

Dermatopharmacology	central nervous	
Total Second semester	system	
	Drug affecting	
Metrology	gastrointestinal function	
Nature and sources of drugs		
Pharmaceutical preparations and drug forms	Drug affecting the respiratory system	
Routes of drug administration	Drug affecting renal function and fluid-electrolyte	
Variations in drug response (Species and individual)	therapy	
Microsomal enzymes activity induction and drug response		
Excretion of drugs		
Prescrition writing		
Dispensing		
Action of drugs on the eyes		
Action of drugs on isolated guinea pigs ileum		
Drugs and effects on the rabbit intestine		
Drugs and effects on rabbit uterus		
Neuromuscular blocking (on the frog)		
Calculation of drug dosage		
Xylazine-ketamine anesthesia in rabbits		
Dose response relationships (ED50, LD50, TI)		
Anticonvulsants		
Determination of blood		
cholinesterase activity		
Organophosphate poisoning		

in rats or mice Xylazine effects in sheep Diuretics Aspirin toxicity (comparison with acetaminophen) Veterinary pharmaceutical preparations Neurobehavioral effects of drugs and toxicants Effects of drugs on the perfused heart
DiureticsAspirin toxicity (comparison with acetaminophen)Veterinary pharmaceutical preparationsNeurobehavioral effects of drugs and toxicantsEffects of drugs on the perfused heart
Aspirin toxicity (comparison with acetaminophen)Veterinary pharmaceutical preparationsNeurobehavioral effects of drugs and toxicantsEffects of drugs on the perfused heart
with acetaminophen) Veterinary pharmaceutical preparations Neurobehavioral effects of drugs and toxicants Neurobehavioral effects of drugs on the perfused heart
preparations Image: Constraint of the sector of the se
drugs and toxicants Effects of drugs on the perfused heart
perfused heart
106. Course Evaluation
Examination:1-
Written mid-term Written final –term
Practical final –term
Oral Examination
Course assessment weight for annual system (100%)
107. Learning and Teaching Resources

Using recent illustrating tools for teaching and scient discussion	ific films . Perform oral examinations and scientific
Required textbooks (curricular books, if any)	Lippincotts pharmacology Howland R.D and ycekM.J
Main references (sources)	
Recommended books and references (scientific journals, reports)	
Electronic References, Websites	Google scolar

		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
-		í
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
		1
	I	1
<u> </u>	· · · · · · · · · · · · · · · · · · ·	

108.	Course Name Toxicology
106.	Course Name:Toxicology
109.	Course Code:Toxicology/ TOX 3201
110.	Semester / Year:2024
111.	Description Preparation Date:2024
112.	Available Attendance Forms:
113.	Number of Credit Hours (Total) /4 Number of Units (Total) 30 hours theatrical 2
114.	Course administrator's name (mention all, if more than one name)
Nam	
Emai	il:
115.	Course Objectives
	ectivesThis course is designed so that the student of
second year	will achieve a general understanding about:
- normal fun	ctions of different systems in mammals and poultry
Normal beha	avior of animals
-	and understanding of the normal physiological basis of on and homeostasis
The laborate	ory portion of this course will emphasize introductory
exercises,	experimental techniques, and data collection of
L	

ological	vari	ables.				
6	Геа	ching and Learning S	trategies			
<u>6.</u> gy	Tea	A- Knowledg A1.The student normal function A2.Functions o during different A3. Knowledge physiological co	 A- Knowledge and Understanding A1.The student will have a comprehensive knowledge and understand normal functions of cell organelles A2.Functions of different body systems and interaction between during different physiological conditions A3. Knowledge about the interaction between body systems during d physiological conditions 			
		A4. The interaction responses between different body systems different non physiological conditionsA5Know the type and methods of completion .Laboratory tests for d body systemsA6 .How to read and analyze the laboratory tests results				
Hour s		•	Unit or subject name	Learning method	Evaluation method	
	ſ	1 00		Oral Examination	Guize	
	gy Course Hour s 4 week	gy Course S Hour Re s Ou 4 weeklyCo	A- Knowledg A1.The student normal function A2.Functions of during different A3. Knowledge physiological co A4. The interate different non ph A5Know the typ body systems A6 .How to read	gy A- Knowledge and Understanding A1.The student will have a comprehend A1.The student will have a comprehend normal functions of cell organelles A2.Functions of different body systems A3. Knowledge about the interaction of physiological conditions A3. Knowledge about the interaction of physiological conditions A4. The interaction responses between different non physiological conditions A4. The interaction responses between different non physiological conditions A5Know the type and methods of combody systems A6.How to read and analyze the labo Course Structure Hour Required Learning Outcomes Unit or subject name 4 weekly Concepts and terminology Lint or subject name	A- Knowledge and Understanding A1.The student will have a comprehensive knowled normal functions of cell organelles A2.Functions of different body systems and i during different physiological conditions A3. Knowledge about the interaction between body physiological conditions A4. The interaction responses between different different non physiological conditions A5Know the type and methods of completion .Lal body systems A6 .How to read and analyze the laboratory tests Course Structure Hour Required Learning Unit or subject name Learning method 4 weeklyConcepts and terminology Oral Examination	

rr	1		
	Mycotoxins	writing	
	Feed_associated toxicants		
	House-hold and industrial products		
	Plants		
	Biotoxins		
	Environmental pollution with toxicants		
	Pharmaceuticals cholinesterase activity		
	Organophosphate poisoning in rats or mice		
	Xylazine effects in sheep		
	Diuretics		
	Aspirin toxicity (comparison with acetaminophen)		
	Veterinary pharmaceutical preparations		
	Neurobehavioral effects of drugs and toxicants		
	Effects of drugs on the perfused heart		
118. Course	Evaluation		
TTO. COUISE			

entific films . Perform oral examinations and scientific
Lippincotts pharmacology Howland R.D an
ycekM.J
Google scolar

COURSE SPECIFICATION

Th	This Course Specification provides a concise summary of the main features of the						
co ex	1. Teaching Institution						
ор	2. University Department/Centre	College of Veterinary medicine					
sp	3. Course title/code	Internal veterinary medicine					
	4. Programme(s) to which itcontributes	Bachelor in general veterinary medicine and surgery					
	5. Modes of Attendance offered						
	6. Semester/Year	Two semester/ year					
	7. Number of hours tuition (total)	course of 26 credits ,theory :12 hours ,practical 28 hours / week. in a total of 15 weeks/ semester= 600 hours/year					
	8. Date of production/revision of this specification	2022-2023					
	9. Aims of the Course						
	Preparethe studentforthe basicinformationof Intern	al and preventive Medicine					

Knowthe studentoninfectious diseases

Knowthe studenton internal medicine diseases

Knowthe studentonepidimiology of diseases

Preparethe studentforthe basicinformation of infectious diseases

10. Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Knowledge and Understanding

A1. Topicsorareasof knowledgethatstudents shouldknowand understandabout the subjects

The student will have a comprehensive knowledge and understanding on animal diseases(cattle, horses, sheep, goats).

A2: Knowledge about the diag

Nosis and treatment of diseases.

- B. Subject-specific skills
- B1.Explainstrategiesand skillsusedin order towrite the students thread
- B2: Creative thinking to improve treatment of animal diseases in animals.

Teaching and Learning Methods

Lectures of every topic in the course.

Collection of some information from textbooks.

77

Lectures, tutorialsandassignmentsused

Assessment methods

Examinations

Examination

Written mid-term

Written final -term

C. Thinking Skills

Sugest a scientific problem and trying to resolve it

Teaching and Learning Methods

Engaging students in discussion during lesson

Testing process and report writing

Provide an opportunity to work through the practical lesson

Assessment methods Duties in report writing 11. Course Structure Skills that should be developed with the student in the field of relationships that benefit others Self-reliance Responsibility towards society Teaching Unit/Module or Assessment Week Hours ILOs TopicTitle Method Method

1	1	Introduction	
2	1	Rinder pest	
3	1	PPR	
4	2	FMD	
5	1	VESICULAR STOMATITIS	
6	2	BLUE TONGUE	
7	2	MD& BVD	
8	2	MCF	
9	2	VIRAL DIARHEA /SMAL RUMINANT AND FOALS	
10	1	H,S	

11	1		BLACK LEG		
12	1		BLACK DISEASE		
13	1		TETANUS		
14	2		ENTEROTOXEMIA		
15	1		BOTULISM		
16	1		BACILLARU HB UREA		
17	1		BRAXY		
18	2		T.B & JOHNS DISEASE		
19	2		ACTINOMYCOSIS &ACTINOBACILLOSIS		
			QACHINOBACILLOSIS		
20	1		ORAL AND LARYNGEAL		
			NECROBACILLOSIS		
21	1		WINTER DYSENTARY		
			OF CATTLE		
22	2		DISEASE OF		
			MOREXELLA		
			&HEMOPHYLUS		
23	1		EIA		
24	1		A.H.S		
25	1		EQUINE RHINO		
			PNEMONITIS		
	Herris		Unit/Module or	Teaching	Assessment
Week	Hours	ILOs	TopicTitle	Method	Method
1	1		EQUINE VIRAL		
			ARTHRITIS		

2	2	EQUINE INFLUENZA	
3	3	VIRAL ENCEPHALOMYLITIS IN HORSE	
4	4	ANAPLASMOSIS	
5	5	THEILERIOSIS	
6	6	BABESIOSI	
7	7	MASTITIS	
8	8	BRUCELLOSIS	
9	9	LEPTOSPIROSIS	
10	10	LISTERIOSIS	
11	11	ANTHRAX	
12	12	COLIBACILLOSIS	
13	13	SALMONELLOSIS	
14	14	FOOT ROT	
15	15	CCPP&CBPP	
16	16	TOXOPLASMOSI	
17	17	ORF	
18	18	PAPLOMATOSIS	
19	19	LUMPY SKIN DISEASE	
20	20	BOVINE ULCERATIVE MAMMALITIS	
21	21	BOVINE EPHEMERAL DISEASE	
22	22	RFT VALLEY FEVER	
23	23	AKABANI VIRAL DISEASE	

2424SOVINE VIRAL LEUKOSISIntermediate2525CARABIESIntermediate2626CAPSEUDO RABIESIntermediate2727CALOUPING ILLIntermediate28SASCRAPIESIntermediateIntermediate2929SCRAPIESIntermediateIntermediate3030CASCRAPIESIntermediate3131CASTRANGLESIntermediate32S1STRANGLESIntermediateIntermediate33S1CONTAGIOUS BOVINEIntermediateIntermediate34SCRAPIESCONTAGIOUS BOVINEIntermediateIntermediate34S1CASEOUS LYMPH ADENTIS OF SHEEPIntermediateIntermediate36S1DISEASE CAUSED BY PARASITEIntermediateIntermediate3737IntermediateIntermediateIntermediate40ursLOSUnit/Module or TopicTitleTeaching MethodAssessment Method1S1IntroductionIntermediateIntermediate3S1IntroductionIntermediateIntermediate3S1IntroductionIntermediateIntermediate3S1IntroductionIntermediateIntermediate3S1IntroductionIntermediateIntermediate3S1IntroductionIntermediateIntermediate3S1IntroductionIntermedi						
1 Control 261 Control PSEUDO RABIES1 Control PSEUDO RABIES1 Control PSEUDO RABIES27273 Control PSEUDO RABIES- Control PSEUDO RABIES- Control PSEUDO RABIES2828SCRAPIES- Control PSEUDO RABORTION IN SHEEP- Control PSEUDO RABORTION- Control PSEUDO RABORTION3030Control PSEUDO RABORTION IN SHEEP- Control PSEUDO RABORTION- Control PSEUDO RABORTION3131Control PSEUDO RABORTIS- Control PSEUDO RABORTIS- Control PSEUDO RABORTIS3131Control PSEUDO RABORTIS- Control PSEUDO RABORTIS- Control PSEUDO RABORTIS3434Control PSEUDO RABORTIS- Control PSEUDO RABORTIS- Control PSEUDO RABORTIS3535Control PARASITE- Control PSEUDO RABORTIS- Control PSEUDO RABORTIS36Second PARASITE- Control PARASITE- Control PSEUDO RABORTIS3737FordMANGE AND PARASITE- Control PARASITE37SinceLLOSUnit/Module or PORICITIETeaching MethodAssessment Method30SinceSinceSinceSinceSinceSince30SinceMILK FEVER- Control Since- Control Since- Control Since30SinceSinceSinceSince- Control Since- Control Since31SinceSinceSinceSince- Control Since- Control Sinc	24	24				
17171717171717171727272735CRAPIES11282835CRAPIES11292935N5RADER113030335RANGLES1131315RANGLES1111313155PIZOATIC (YMPHANGITIS11131315CONTAGIOUS BOVINE (PYELONEPHRITIS)1113135SASEOUS LYMPH (PYELONEPHRITIS)1113135SASE CAUSED BY (PYELONEPHRITIS)1113135SASE CAUSED BY (PMENAGITIS)111311MANGE AND PARASITE1111311MANGE AND PARASITETeaching MethodSasessment Method1311SASESASE CAUSED BY (PARASITESasessment Method13231MANGE AND PARASITE11341SASESASE CAUSED BY (PARASITESasessment Method1341SASESASE CAUSED BY (PARASITESasessment Method1341SASESASE CAUSED BY (PARASITESasessment Method1351SASESASE CAUSED BY (PARASITESasessment Method1351S	25	25		RABIES		
1000000000000000000000000000000000000	26	26		PSEUDO RABIES		
1 And A	27	27		LOUPING ILL		
1000000000000000000000000000000000000	28	28		SCRAPIES		
1 A C A A A A A A A A A A A A A A A A A	29	29				
A C C C C C C C C C C C C C C C C C C C	30	30		GLANDER		
Image: series of the series	31	31		STRANGLES		
Image: series of the series	32	32				
Image: series of the series	33	33				
Image: series of the series	34	34				
Image: series of the series	35	35				
Image: Normal and series of the series of	36	36				
WeekHoursILOsOnly module of TopicTitleMethodMethod13IntroductionIntroductionIntroduction23IntroductionIntroductionIntroduction33DOWNER COWIntroduction	37	37		MANGE AND PARASITE		
Image: A constraint of the const	Week	Hours	ILOs		Teaching	
23MILK FEVERImage: Second sec				TopicTitle	Method	Method
3 3 DOWNER COW Image: Comparison of the compar	1	3		Introduction		
	2	3		MILK FEVER		
	3	3				

4,	3		HYPOMAGNESEMIA		
5,6	3		PREGNANCY TOXEMIA		
7	3		KETOSIS		
9.10	3		POST PARTURENT HB UREA		
12	3		AZOTUREA		
13	10		CARDIOVASCULAR SYSTEM		
14	3		VIT. D DEFICIENCY		
15	3		CA.DEFICIENCY		
16	3		P DEFICIENCY		
17	2		OSTEOMALASIA		
18	2		VIT A DEFICIENCY		
19	2		VIT. E DEFIVIENCY		
20	2		VIT.K DEFIVIENCY		
21	2		CUPPER DEFICIENCY		
22	2		IODINE DEFICIENCY		
23	2		MN DEFICIENCY		
24	2		ZN DEFICIENCY		
25	2		CO DEFICIENCY		
26	2		VIT C DEFICIENCY,THIAMIN E,RIBOFLAVIN DEFICIENCY		
Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method

1	3	Laboratory apparatus	
2	3	Samples collection	
3	3	PCV&Hb measurement	
4	3	WBCs count	
5	3	RBCs count	
6	3	Blood smear staining	
7	3	Differential WBCs count	
8	3	Bacteriological culture	
9	3	Bacteriological smear staining	
10	3	Clinical chemistry	
11	3	Blood parasites	
12	3	Revision	
13	3	Examination	
14	3	Fecal examination	
15	3	Identification & count of egg parasites	
16	3	Milk test	
17	3	Urine test	
18	3	Skin scraping and external parasites identification	

12. Infrastructure	
Re 13. Admissions	
TS. AUTHISSIONS	
Pre-requisites	
Minimum number of students	
Sp Maximum number of students	
forexamplateoror proprion SITE VISIT CHEDULE	
periodicals,IT software,	
websites)	
The typical site visit schedule is designed for two or three days. It includes pre-arranged meeting	s.
Corresponstlyilbasedafaailgtigsthese meetings and fitting the template to the circumstances	
restswith the Universities Quality Assurance and University Performance departments (include for example, guest	
2.Site visits will normally commence at 09:00 on day 1. Start times of pre-arranged meetings	
accidings ed ne constraint for the stain of the state of	
scheduleshould not completely fill all times with meetings, but leave space for additional activiti studies, bypeer reviewers including preparing for meetings, updating notes and records and	es
draftingparagraphs for the draft Programme Review report	

Table (1)

Session	Time	Activity
Day1		
1	09:00	Welcome and introductions; brief introduction to the review (purposes,intended outcomes, use of evidence and self- evaluation report) – ProgrammeTeam
2	09:30	Curriculum; discussion with faculty members
3	11:00	Meeting with a group of students
4	12:30	Efficiency: tour of resources
5	14:00	Review panel meeting: scrutiny of additional documentation includingsample of students' assessed work
6	15:00	Efficiency: meeting with faculty members
		Review panel meeting: review of the evidence and any gaps or

7	16:00	matters tofollow-up
8	17:00	Meeting with external stakeholders (sample of graduates, employers, otherpartners)
Day2	1	
9	08:45	Review meeting with review chairperson, review coordinator, programmeleader: summary of day 1 findings, addressing any gaps, adjust the schedulefor day 2 if required
10	09:00	Academic standards: meeting with faculty members
11	10:30	Effectiveness of quality management and assurance: meeting with facultymembers
12	12:00	Review panel meeting: review of evidence and any matters still to beaddressed
13	14:00	Flexible time to pursue any matters arising
14	14:30	Review panel final meeting: decisions on outcomes and drafting oralfeedback
15	16:30	Oral feedback by review chairperson to review coordinator and facultymembers
	17:00	Close

TEMPLATE FOR THE FOLLOW-UP PROCESS

AND REPORT, AND OUTLINE OF TYPICAL SITE VISIT SCHED-

ULE FOR FOLLOW-UP

TEMPLATE FOR FOLLOW-UP REPORT

Quality Assurance and Academic Accreditation Directorate / International Accreditation Department.

Institution:

Faculty:

Programme:

Follow-up Report

- 1. This report presents the findings of the follow-up visit, which took place on / /20__. Thisis part of the Universities Quality Assurance and University Performance departmentsarrangements to provide continuing support for the development of internal quality assurance processes and continuing improvement
- 2. The purposes of the follow-up review are to assess the progress made in the programmesince the Programme Review report, and to provide further information and support for the continuing improvement of academic standards and quality of higher education in Iraq.
- 3. The evidence base used in this follow-up review and report includes:
 - a) Self-Evaluation Report for the programme together with supporting information
 - b) Improvement plan prepared and implemented since the Programme Review report
 - c) Programme Review Report
 - d) Higher Education Quality Review Report and institutional strategic plan (if any)
 - e) Additional evidence presented during the follow-up visit.
- 4. The overall conclusions reached as the outcome of the follow-up review are as follows:
 - a) The programme (give title) at (give name of institution) has/has not successfully implemented an improvement plan.
 - b) Good practice in the indicators demonstrated since the Programme Review sitevisitincludes: (insert)
 - c) Matters of particular importance that should be addressed by the institution in its continuing improvement of the programme are: (insert and indicate if they are, or asyetare not, addressed by the improvement plan).

5. The detailed report is provided in Annexure A below.

Annexure A

Name of Institution_____

Date of initial Programme Review site visit_____

Date visited in follow-up_____

Date of follow-up report_____

Names of follow-up reviewersPosition/titleSigned

Ра	Part 1: The Internal Quality Assurance System in operation				
	Questions	Yes? (√)	Comment	Further action required?	
1	Is the programme Self- Evaluation Report complete?				
2	Do the most recent self-evaluation reports indicate the extent to which thecriteria in the Framework for Evaluationare met and/or are being addressed?				
3	Is there an improvement plan in place, informed by external and internal review?				
4	Are there any major gaps that appear not to be addressed?				

5	Is progress with the improvement plan monitored?		
6	Are there any major obstacles tothe expected achievement of the improvement plan?		
7	What is the institution's estimate of the time needed to complete improvements to the programme?		
8	What is the reviewers' assessment of the time needed to complete improvements tothe programme that would demonstratethe indicators?		

Part 2: Progress demonstrated with the indicators					
Indicators (refer to Framework of Evaluation)	Improvement plan points (comment on match with the Programme Review report's recommendations)	New information from follow-up site visit	Overall conclusion		
<u>Curriculum</u>					

Aims and ILOs		
Syllabus (content)		
Progression year on year		
Teaching and Learning		
Student assessment		
Efficiency		
Profile of admitted		
students		
Human resources		
Physical resources		
Uses made of available		
resources		
Student support		
Ratios of graduation to		
admitted students		
Academic Standards		
Clearly articulated		
standards		
Use of appropriate		
benchmarks		
Achievement of graduates		
Standards of students'		
assessed work		
Programme management		
and Assurance		
Arrangements for		
programme management		
_		

Policies and procedures		
applied		
Structured comments		
collected and used		
Staff development needs		
identified and addressed		
Improvement planning		
processes working		

CRITERIA FOR A SUCCESSFUL REVIEW ANDEVALUATION OF THE PROCESS

CRITERIA FOR A SUCCESSFUL REVIEW

- 1. The criteria for a successful review that informs the arrangements for Programme Reviewandits evaluation are as follows:
 - i. The programme being reviewed is supported by existing or developing internal systems including specifications and review with a culture of self-evaluation and continuing improvement. These features of internal review provide a sound basis for the external review.
 - ii. The timing of the external review is appropriate.
 - iii. The profile of the visiting peer review panel matches in broad terms the profile of theacademic activities in the institution.
 - iv. There is due attention to detail in planning and preparation, by
 - a. The Quality Assurance and Academic Accreditation Directorate applies consistently its procedures for working with the institution and the reviewers and provides appropriate support for the external review as required
 - b. The review coordinator: ensures that the evidence base generated by internal reviewand reporting systems is available on time to the visiting peer reviewers, and anyrequirements for clarification and supplementary information are satisfied
 - c. The institution: provides a self-evaluation report for the programme to be externally reviewed
 - d. The peer reviewers: undertake their preparation for the visit including reading theadvance documentation and preparing initial commentaries that inform the conductof the visit
 - v. There is consistency in the application of the published review method and the protocolsby all participants in a way that respects and supports the mission and philosophy of theoverall process for continuing review and continuing improvement.
 - vi. Reviewers and representatives of the institution conduct an open dialogue throughout thereview that shows mutual respect.
 - vii. The judgements reached by the reviewers are clear, based on the evidence available and systematically recorded.
 - viii. The review report is produced on time in line with the standard report structure and

isconfirmed by the institution to be factually accurate.

- ix. The set of conclusions arising from the review are constructive, offering a fair and balancedview of the programme.
- x. The institution is able to benefit from the external review by giving due reflection and consideration to the findings and preparing where appropriate a realisticimprovementplan

EVALUATION

2.The Quality Assurance and Academic Accreditation Directoratewishes to establish and implement procedures forthe systematic evaluation of all external Programme Reviews arranged by it. The institution, thereview chairperson and the peer reviewers will all routinely be asked to evaluate each externalreview by completing a short questionnaire. The structured comments will be analysed by theQuality Assurance and Academic Accreditation Directorateand where necessary the Quality Assurance and Academic Accreditation Directoratewill take action to follow-up any difficultieshighlighted. In addition, the Quality Assurance and Academic Accreditation Directoratewill collate the structured comments to compile regularsummary reports indicating the main features of the review process in practice, including theoverall levels of satisfaction expressed by the participants, together with examples of goodpractice and opportunities for continuing improvement.

GLOSSARY OF TERMS IN PROGRAMME RE-

VIEW

DEFINITIONS OF TERMS USED IN THE PROGRAMME REVIEW HANDBOOK

Some of the terms used in the Handbook and/or used in internal and external review and reportingmay have different meanings according to the context in which they are used. To remove possibleambiguities, the following working definitions of the terms are offered.

ADEMIC FIELDS/SUBJECT AREAS/DISCIPLINES

Academic fields categoriserecognisable and coherent domains or the scope of study such asMathematics, Medicine, Engineering and Philosophy. Fields that have a wide scope are oftensubdivided; for example, Humanities include subjects like History and Literature and Arts mayinclude separate disciplines of Fine Arts and Photography. The curriculum of someprogrammes may combine academic fields, or may include different subjects and disciplines suchas Mathematics in Engineering or Accountancy in Business Administration.

ACADEMIC STANDARDS

Specific standards decided by the institution, and informed by external reference points. Theyinclude the minimum or threshold level of knowledge and skills to be gained by the graduatesfrom the programme, and can be used in evaluation and review.

ACCREDITATION

The recognition accorded by an agency or other organisation to either an education programmeor to an institution to confirm that it can demonstrate that the programme(s) meet acceptablestandards and that the institution has effective systems to ensure the quality and continuingimprovement of its academic activities, according to published criteria.

ACTION OR IMPROVEMENT PLANS

Realistic plans for improvement derived from the consideration of available evidence and evaluations; they may be implemented for more than one year, but should be prepared and reviewed annually at each level of courses, programmes and the institution.

ADMITTED STUDENTS

Students registered on a programme, including those accepted holding prior credits for admissionafter year 1.

BENCHMARK/REFERENCE POINTS

Benchmark statements represent general expectations about the standards ofachievement and general attributes to be expected of a graduate in a given academicfield or subject. Reference standards may be external or internal. External referencepoints allow comparison of the academic standards and quality of a programme withequivalent programmes in Iraq and internationally. Internal reference pointsmay be used to compare one academic field with another, or to identify trends over agiven time period.

COMMUNITY

A defined segment of wider society served by the institution, as determined in its mission andbylaws. It may be defined geographically or in terms of the range of organizations, groups and individuals engaged in its activities.

COURSE AIMS

Overall course aims should be expressed as the outcomes to be achieved by students completing the course as significant and assessable qualities. They should contribute to the achievement of defined aims within one or more education programmes.

CURRICULUM OR (IN THE PLURAL) CURRICULA

The complete organised learning as designed and managed by an institution for an admittedstudent, determined by the intended learning outcomes (ILOs) and comprising the content, the arrangements for teaching and learning and assessments of students' achievementstogether with the access to the range of facilities available within the University and, byarrangement, outside it, including libraries, computers studies, social, sports, internshipsand field studies.

DIRECTED SELF-LEARNING/INDEPENDENT LEARNING

The active promotion of personal skills included in the curriculum that support the student andgraduate to seek, assimilate and learn from a range of structured and unstructured experiences. Methods of promotion include e-learning, personal and autonomous learning and fieldwork, assignments, internships, and reflexive learning. Devices commonly used that support directedself-learning beyond formal teaching lectures include logbooks, self-assessment reports, interactivelearning tools or the equivalent.

E-LEARNING

Electronic-based learning using information technology may be the primary or secondaryelement in material associated with a programme or a course. It may be stand-alone or integrated with other teaching and learning approaches. It may include self-determination

of aims, ILOs and materials using self-selection and will usually include self-assessment. Itgenerally increases the levels of autonomy in, and responsibility for, learning. Convertingexisting texts or lecture notes to a website or pre-recorded media alone is generally notconsidered to be e-learning.

EXTERNAL EVALUATOR/EVALUATION

An appointment to a specific programme, part of a programme or course(s) by the institution toestablish an independent and external professional opinion on the academic standards set andachieved in the examinations for the award of the degree.

FRAMEWORK FOR EVALUATION

The framework for evaluation provides a standard structure for evaluation of programmes. It willform the basis for self-evaluation, the site visit by external peer reviewers and the ProgrammeReview report. It is designed to operate in all academic fields and institutions, and to apply to internal and external reviews.

GENERAL PRECEPTS/BY-LAWS

Principles, by-laws and regulations, which the educational institution must have as part of thepolicies covering its operations.

HIGHER EDUCATION INSTITUTE (HEI)/INSTITUTION

A Faculty, College or University providing higher education programmes leading to a first universitydegree (B.Sc. or B.A.) or a higher degree.

INTENDED LEARNING OUTCOMES (ILOS)

The ILOs are the outcome-related definition of knowledge, understanding and skills which

the institution intends for its programmes. They should be mission-related, capable ofmeasurement (assessable) and reflect the use of external reference standards at appropriate

level.

INTERNAL SYSTEM FOR QUALITY MANAGEMENT AND ASSURANCE

The system adopted by the institution to ensure that its education programmes and

reviewand development of processes for establishing effective policies, strategies and priorities to

JOB/LABOUR MARKET

supportcontinuing improvement.

The availability of professional, commercial, research-oriented or other fields of employment thata graduate is qualified to join upon graduation.

MISSION STATEMENT

A brief statement clearly identifying the educational institution's duty and its role in the development of the community; a mission statement may also offer brief supporting statements on the vision, values and strategic objectives of the institution.

PEER REVIEWER

A person who is professionally equal in calibre and with management and/or subject expertise to those delivering the provision, but not from the same institution and without any conflict of interest, who can contribute to the review of an education programme for internal and external quality assurance or for accreditation purposes.

PROGRAMME

For the purpose of Programme Review an education programme is defined as one which admitsstudents who, on successful completion, receive an academic award.

PROGRAMME AIMS

The broad purposes for providing the programme which in turn guide the development and

implementation of strategic objectives (to ensure that the aims are met) and ILOs (to ensure that the students work towards attaining the specified outcomes).

PROGRAMME REVIEW

Programme Review applies to all education programmes in all higher education institutions.

Where the programme is studied in more than one institution, the whole programme is included in Programme Review. Programme Review in Iraq has three objectives:

- 1) To provide decision-makers (in the higher education institutions, Quality Assurance and Academic Accreditation Directorate, parents, students, and other stakeholders) with evidence-based judgements on the quality of learning programmes
- 2) To support the development of internal quality assurance processes with informationon emerging good practice and challenges, evaluative comment and continuingimprovement
- 3) To enhance the reputation of Iraq's higher education internationally.

QUALITY ASSURANCE

The institution has the means of assuring that for each education programme, academic standardsare defined and achieved in line with equivalent national and international standards, that thequality of the curriculum and related infrastructure are appropriate and fulfil the expectations of the range of stakeholders, that its graduates represent the range of attributes specified and that theorganisation is capable of sustained, continuing improvement.

REVIEW COORDINATOR

The nominee of an institution to coordinate a Programme Review to assist in the gathering and interpretation of information and to support the application of published methods of review.

REPORT

The regular reports prepared on the basis of Programme Reviews and evaluations of its educationprogramme.

SELF-EVALUATION

n institution's process of evaluating a programme as part of Programme Review and within aninternal system of quality management and assurance.

SITE VISIT

A scheduled visit by external peer reviewers as part of Programme Review. Normally the site visitwill be for two or three days. A typical outline timetable is provided in Appendix(1).

SPECIFICATION

The detailed description of the aims, construction and intended outcomes of a programme, and anycourses, specific facilities or resources that contribute to it. The specification provides information to design, manage, deliver and review the programme.

STAKEHOLDER

Those organisations, groups or individuals which have a legitimate interest in the educationalactivities of the institution both in respect of the quality and standards of the education and alsoin respect of the effectiveness of the systems and processes for assuring the quality. An effectivestrategic review process will include the key stakeholder groups. The precise range of stakeholdergroups and their differentiated interests depend upon the mission of the institution, its range ofeducational activities and local circumstances. The range is usually defined by a scoping study.Examples of groups with a legitimate interest include current students, graduates, intendingstudents and their parents or family, staff in the institution, the employing community, the relevantGovernment ministries, the sponsors and other funding organisations and, where appropriate, professional organisations or syndicates.

STRATEGIC OBJECTIVES/PLANS

A collection of institution-specific objectives that are derived from its mission and developed into arealistic plan based on evidence-based evaluations. Objectives concentrate on the means by whichan institution seeks to deliver its mission. The plan sets out the matters to be addressed, timeframe, person responsible and estimate of costs, and is accompanied by an implementation plan witharrangements for monitoring the progress and evaluating impact.

STUDENTS'ASSESSMENT

A set of processes, including examinations and other activities conducted by the institution tomeasure the achievement of the intended learning outcomes of a programme and its courses. Assessments also provide the means by which students are ranked according to their achievement. Diagnostic assessment seeks to determine the existing range of knowledge and skills of a studentwith a view to constructing an appropriate curriculum. Formative assessment provides information the student's performance and progress to support further learning, without necessarily counting grade towards graduation. Summative assessment determines the final level of attainment of thestudent on the programme or at the end of a course that contributes credits to the programme.

STUDENTS' EVALUATIONS

The systematic gathering of students'opinions on the quality of their programme in a standardizedstructure together with the analysis and outcomes. Surveys using questionnaires are the mostfrequently used methods to collect opinions; other mechanisms include websites conferences, panels or focus groups, and representation on councils or other committees.

TEACHING AND LEARNING METHODS

The range of methods used by teachers to help students to achieve the ILOs for the course.

Examples include: lectures, small group teaching such as tutorials, seminars and syndicate groups; a case study to teach students how to analyse information and reach a decision; assignments such as writing a review paper for the students to gain the skills of self-learning and presentation; fieldtrips; practical sessions for the students to gain practical skills; and carrying out experiments to train the students to analyse the results, reach specific conclusions and prepare a report, presentation or poster.