Republic of Iraq
Ministry of Higher Education & Scientific Research
Supervision and Scientific Evaluation Directorate
Quality Assurance and Academic Accreditation
International Accreditation Dept.

Academic Program Specification Form For The Academic Year 2022-2023

University: Baghdad
College : Veterinary Medicine
Departments In The College : Physiology and Pharmacology

Dean ' s Name
Date : 16 / 10 / 2022
Signature

Dean ' s Assistant For Scientific Affairs
Date : 16 / 10 / 2022
Signature

The College Quality Assurance And University Performance Manager
Date : 16 / 10 / 2022
Signature

QUALITY ASSURANCE & ACADEMIC PERFORMANCE DIVISION

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Programme Specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the programme.

1. Teaching Institution	Ministry of Higher Education and scientific research
2. University Department/Centre	University of Baghdad College of Veterinary Medicine/ Department: physiology and pharmacolgy
3. Programme Title	Bachelor in general veterinary medicine and surgery
4. Title of Final Award	Bachelor in general veterinary medicine and surgery
5. Modes of Attendance offered	Two Terms / yearly
6. Accreditation	
7. Other external influences	Non
8. Date of production/revision of this specification	
9. Aims of the Programme	
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.	
٢The programme provides, in the early years, a broad-based knowledge and understanding -of the range of Biomedical subjects,	
٣The wide range of courses offered in the study years allows students to specialize in particular	

areas within a discipline or cover a broad curriculum.-

Most importantly courses are designed specifically around the research interests of the academic staff thereby 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

A5K.nowlege 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
C4.

Teaching and Learning Methods

1- Lectures
2-Practical sections
3-Field conveys
4-Samanarat
5-Discussion groups
6- Teamwork

Assessment methods

Description of recent methods teaching and student learning.
Description of methods of students' assessments in relation to the described intended learning outcomes
Short tests
Questions of dialogue and discussions within lectures
.Assigning student research work related to the decision
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

From an early stage, the concurrent demands of different components of the programme encourage the development of effective planning.
.Assigning student research work related to the decision-
Try to know the student's mistakes and corrected him
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 Structure				12. Awards and Credits
Level/ Year	Course or Module Code	Course or Module Title	Credit rating	
first	Anatomy Animal management Chemistry Computer Biology English language	ANT ANM CHM1401 COM BIO ENG		Bachelor Degree Requires (x) credits
Second	Anatomy Histology Animal nutrition Biochemistry Physiology Genetics	ANT HIS ANN BCH2402 PHY2502		
Third	Microbiology Pathology Parasitology Pharmacology Immunology Toxicology	MIC PAT PAR PHR3402 IMN TOX3201		

Fourth	Surgery Poultry diseases Clinical pathology Theriogenology Medicine Infectious diseases &epidemiology	SUR POU CLP THE MED INF		
Fifth	Clinic Veterinary public health Fish diseases Obstetric Surgery Research project	CLN VPH FDS OBS SUR RES		

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

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

Curriculum Skills Map																	
please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed																	
				Programme Learning Outcomes													
Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transferable Skills (or) Other skills relevant to employability and personal development			
				A1	**A2**	**A3**	**A4**	**B1**	**B2**	**B3**	**B4**	**C1**	**C2**	**C3**	**C4**	**D1**	**D2**	**D3**	**D4**

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	
2. University Department/Centre	College of Veterinary medicine
3. Course title/code	Animal physiology / PHY2502
4. Programme (s) to which it contributes	Bachelor in general veterinary medicine and surgery
5. Modes of Attendance offered	
6. Semester/Year	Tow semester/ year
7. Number of hours tuition (total)	course of 5 credits ,theory :4 hours ,practical 2hours / week. in a total of 15 weeks/ semester= 180 hours/year
8. Date of production/revision of this specification	1//4/ 2014
9. Aims of the Course	
This 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

10· Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Knowledge and Understanding

A1.The student will have a comprehensive knowledge and understanding on normal functions of cell organelles

A2.Functions of different body systems and interaction between them during different physiological conditions

A3. Knowledge about the interaction between body systems during different physiological conditions

A4. The interaction responses between different body systems during different non physiological conditions

A5Know the type and methods of completion .Laboratory tests for different body systems

A6 .How to read and analyze the laboratory tests results

B. Subject-specific skills

B1. Creative thinking to improve reproductive performance in animals.

B2. Analysis of laboratory blood and urine tests.

B3.

Teaching and Learning Methods

Lectures and practical of every topic in the course.

Collection of some information from textbooks.

Assessment methods

-١Examination:

Written mid-term

Written final –term

Practical final –term

Oral Examination

Course assessment weight for annual system (100%)

First semester		Second semester		Final Examination	
Theoretical	Laboratory work	theoretical	Laboratory work	theoretical	Laboratory work
15%	%١٠	%١٥	%١٠	%٢٠	%٣٠

2- daily evaluation

3- Reports writing

C. Thinking Skills
C1. Collection and handling of laboratory: equipments, chemicals, and animals
C2.Use of new technology
C3.Group working ,good management and problem solving ability.
C4.Performing practical experiments

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
Accustom the student to devise a scientific analysis of the information

D. General and Transferable Skills (other skills relevant to employability and personal development)
D1.Good communication
D2.Use of new technology
D3. Group working, good management and problem solving ability.
D4. Handling of blood samples

11-Course content				
1st Semestar				
Unit/Module or Topic Title	Practical topics	Hours		
		No.of hours	lecture	practical
Cell physiology	Introduction operation of physiographic equipment. Muscle and nerve preparation	14	٨	٤
Physiology of Nerve and muscle	The simple muscle twitch	٦	٤	٢
Autonomic Nervous system	Skeletal muscle contraction		٨	٤
Cardiovascular System	Frog's ECG Blood pressure heart		١٠	٦
Mid. Term examination				
Digestive system	Small intestine smooth muscle contraction Reflexes of digestion		١٢	٢
Body fluids:- blood physiology and hemostasis	Blood sample collection &smear preparation RBCs count PCV, Hb, and erythrocytes indices Total WBCs count Fragility test Bleeding disorders tests Platelets count ABO		14	١٢
2nd semester				
Renal system	Farm visit		10	2
Respiratory System	Chest examination . lung function tests		10	٤
Acid- base balanc			٢	-
Endocrine system	Practical exam		10	٢
Mid- term exam.				
Male Reproductive	Evaluation of seminal fluid		٦	٤

system				
Female reproductive system	Estrus cycle		٦	٤
CNS physiology and sensation	Reflexes Effects of exercise and gravity on HR, BP, and respiration. Sensory physiology		١٢	6
	Final examination			

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Course Notes (By Staff Members) Swenson M. J. and Reece W. O. (1993): Duke's Physiology of DomesticAnimals. 11th Ed., Ithaca, NY, Cornell Univ. Press Guyton A. C and Hall J. E. (1996): Textbook of Medical Physiology. 9th Ed.,W.B. Saunders CO.
Special requirements (include for example workshops, periodicals, IT software, websites)	Laboratory devices & equipments Data show, Screen, new references in library
Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions	
Pre-requisites	
Minimum number of students	
Maximum number of students	

TEMPLATE FOR COURSE SPECIFICATION

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COURSE SPECIFICATION

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1. Teaching Institution	
2. University Department/Centre	College of Veterinary medicine
3. Course title/code	Biochemistry/ BCH 2 402
4. Programme (s) to which it contributes	in general veterinary medicine and surgery
5. Modes of Attendance offered	

6. Semester/Year	Tow semester/ year
7. Number of hours tuition (total)	course of 4 credits ,theory :3hours ,practical 2hours / week. in a total of 15 weeks/ semester = 150 hours/year
8. Date of production/revision of this specification	1//4/ 2014
9. Aims of the Course	
biochemistry to undergraduate students to make them understand the scientific bases of life processes at the molecular level and to orient them towards the broad goal of application of knowledge acquired in solving clinical problems	

10· Learning Outcomes, Teaching ,Learning and Assessment Methods
A- Knowledge and Understanding A1.Ability to describe molecular and functional organization of the cell and list its sub cellular components . A2.Delinate structures, functions, and interrelation ship of bimolecular and consequences of deviation from normal. A3.Integrate various aspect of metabolism and their regulatory pathways. A4.summerize the fundamental aspect of enzymology. A5.Suggest experiments to support theoretical concepts and clinical diagnosis. A6 .outline biochemical bases of genetic material and mechanisms of genexpresion
B. Subject-specific skills B1.Make use of conventional teqniques – instruments to perform biochemical analysis relevant to clinical screening and diagnosis. B2.Analyse and interpret investigative data. B3.Methods of detection of normal constituents of biological fluid in the body B4- demonstrate the skills of solving scientific and clinical problems and dissection making.
Teaching and Learning Methods
Lectures Practical experiments Report and data analysis

Assessment methods

-١Examination:
Written mid-terms
Written final –term
Practical final –terms
Oral Examination
Course assessment weight for annual system (100%)

irst semester		Second semester		Final Examination	
heoretical	Laboratory work	theoretical	Laboratory work	theoretical	Laboratory work
5%	%١٠	%١٥	%١٠	%٢٠	%٣٠

2- Quizzes
3- Reports writing and home duties

C. Thinking Skills
C1.Sugest a scientific problem and trying to resolve it
C2.Linking of theoretical with practical knowledge
C3.Working in teams to perform and analyze experiments
C4.Widen the ability to discuss and make a decision

Teaching and Learning Methods

Using recent illustrating tools for teaching and scientific films . Perform oral examinations and scientific discussion

Assessment methods

Groups discussion
Reports writing

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

personal development)
D1Laboratory manipulation
D2.General knowledge of handling of chemicals and laboratory equipments
D3.Clinical evaluation of diseased condition
D4.

11- course contents			
1st semestar			
Unit/Module or Topic Title		Hours	
	Practical topics	lecture	practical
Cell biochemistry	**General instruction**	٤	٢
Enzyme :mechanism of action, kinetic, regulation	**Carbohydrate**	٦	٢
Hormones: hormone action ,signal transduction	**General qualitative tests**	٤	٢
biological oxidation, oxidative phosphorylation	**proteins**	٤	٤
Mid. Term examination	**Unknown of carbohydrates**		٢
CHO metabolism, glycolysis ,Gluconeogenesis, Pentose phosphate pathway	**Determination of optimum Ph and temperature of α-amylase enzyme**	٥	٤
TCAcycle,catabolism of acetyl CoA	Urine sample analysis	٤	٢
Glycogenesis, Glycogenolysis	Normal and abnormal constituents of urine	٣	4
Metabolism of CHO in ruminants	Unknown of urine	٤	٢
Vitamins	Paper chromatogrophy	٨	٤
2nd semestar			
Lipids : oxidation of fatty acid ,ketogenesis ,biosynthesis of fatty acids	**Photometric methods in biochemical analysis**	6	2
Cholesterol synthesis ,transport & excretion	**Determination of serum total protein**	٤	٢
Metabolism of lipids in ruminants	**Determination of serum amylase activity**	٤	٢
Anabolism & catabolism of protein & amino acids	**Determination of serum total calcium**	4	٢
Nucleotides & nucleic acid	**Determination of serum creatinine**	٣	٢

structure & function			
Metabolism of nucleotides	**Determination of serum uric acid and urea**	٣	٤
RNA synthesis process ,modification	**Determination of serum bilirubin**	٣	2
Mid. Term examination	**Examination**		٢
DNA organization replication & repair. Protein synthesis & the genetic code.	**Separation of lipids from phospholipids**	4	٢
Free radical and antioxidants	**Determination of serum cholesterol**	4	٢
Metabolism of Na^{+}, K^{+} &Ca^{++}	**Enzymatic method for glucose**	٤	٢
	Determination of serum total lipid		٢

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	**Harper`s illustrated biochemistry; Murray et al** **Biochemistry – An Introduction Mckee and Mckee**
Special requirements (include for example workshops, periodicals, IT software, websites)	Laboratory devices & equipments Data show, Screen, new references in librar
Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	
2. University Department/Centre	College of Vetrinary medicine
3. Course title/code	General chemistry / CHM1401
4. Programme(s) to which it contributes	Bachelor in general veterinary medicine and surgery
5. Modes of Attendance offered	
6. Semester/Year	One semester/ year
7. Number of hours tuition (total)	course of 4 credits ,theory :3hours ,practical 2hours / week. in a total of 15 weeks/ semester= 75 hours/year
8. Date of production/revision of this specification	1//4/ 2014
9. Aims of the Course	
Study of general chemistry involves inorganic ,analytica ,organic chemistry and	

biochemistry

10· Learning Outcomes, Teaching ,Learning and Assessment Methods

A- Knowledge and Understanding
A1.Principles of general chemistry
A2.Knoweledge of analytical, in-organic, organic chemistry
A3.Knoweledg in handling and preparation of chemical solutions
A4.Knpwelede in dangerous of chemicals and Occupational Safety
A5.
A6 .

B. Subject-specific skills
B1.Methods of chemical solutions preparation
B2.Methods of different chemical reaction including titration and precipitation
B3.Nadling of laboratory equipment and instruments

Teaching and Learning Methods

Lecturing
Home Duties
Qualitative and Qualitative analusis experiments

Assessment methods

-١Examination:
Written mid-term
Written final –term
Practical final –term
Oral Examination
Course assessment weight for annual system (100%)

Mid . term		Final Examination	
theoretical	Laboratory work	theoretical	Laboratory work
%٢٥	%١٥	%٢٠	%٤٠

2- daily evaluation
3- Reports writing

C. Thinking Skills
C. Knowledge and careful dealing with chemicals
C2. Discrimination between chemical materials on the basis of Occupational Safety
C3. Problem resolution
C4.Work in team

Teaching and Learning Methods

Duties in report writing
- Accustom the student to devise a scientific analysis of the information

Assessment methods

Feed back evaluation
Small group discussion

D. General and Transferable Skills (other skills relevant to employability and personal development)
D1.Practical skills
D2.Dealing and handling with computer and other laboratory equipment
D3.Experianc in chemicals Occupational Safety
D4.

11. Course Structure

1st Semester

Week	Unit/Module or Topic Title	**Laboratory Work**	Hours		
			No.of hours	Lectures	Practical
١	**Atom and electronic structure**	Laboratory glass ware and techniques			
٢	**Types of chemical bonds**	Qualitative analysis of cations			
٣	**Acid – Base theory**	Analysis of a mixture of groups (1) ions			
٤	**Volumetric analysis titration of acid with base**	Titration of strong acid with strong base			
٥	**Organic chemistry**	Analysis of amixture of NaOHand N_a2CO_3			
٦	**Alkenes and alkynes Aromatic compounds**	Standardization of HCl solution with standard solution of N_a2CO_3			
٧	**Mid. Term examination**				
٨		Determination of Fe in $FeSO_4$ Solution			
٩	**Organichalides, Alcohols and phenols**	Determination of normality of $KMnO_4$ solution			
١٠	**Aldehydes and ketones**	Precipitation , titration : Determenation of chloride by mohr method			
١١	**Carboxylic acids**	Determination of the strengthvolume of H2O2 solution			
١٢	**Anhydrides, esters, and amides of carboxylic acids**	Standardization of NaS_2O_3 solution			

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	➢ Organic chemistry for students of biology and medicine , G . A. Taylor ➢ General chemistry , Ebbing ➢ Chemistry of organic compounds , noller 3rd . Edition ➢ An introduction to chemical analysis walter E. Harris , Byron Kratochvil , 1982
Special requirements (include for example workshops, periodicals, IT software, websites)	

Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	
2. University Department/Centre	College of Veterinary medicine
3. Course title/code	Pharmacology/ PHR3402
4. Programme(s) to which it contributes	Bachelor in general veterinary medicine and surgery
5. Modes of Attendance offered	
6. Semester/Year	Tow semester/ year
7. Number of hours tuition (total)	course of 4 credits ,theory :3hours ,practical 2hours / week. in a total of 15

	weeks/ semester= 150 hours/year
8. Date of production/revision of this specification	
9. Aims of the Course	
.	

10· Learning Outcomes, Teaching ,Learning and Assessment Methode
A- Knowledge and Understanding A1K.nowledge of principles of pharmacology science A2. Knowledge of clinical orientation of drugs usage in treatment of diseases A3. Knowledge of side and adverse effects of drugs A4. Knowledge of interaction of drugs A5. Knowledge of kinetics of drugs in case of disease and normal A6 .
B. Subject-specific skills B1.Principles of drugs formulation and dosing B2.Preparation of some formulated drugs B3.Handiling of laboratory animals and performing some experiment in pharmacology
Teaching and Learning Methods
Lectures Practical experiments Duties assess and analysis of results
Assessment methods
-١Examination: Written mid-term Written final –term Practical final –term

Oral Examination

Course assessment for annual system (100%)

First semester		Second semester		Final Examination	
Theoretical	Laboratory work	theoretical	Laboratory work	theoretical	Laboratory work
15%	%١٠	%١٥	%١٠	%٢٠	%٣٠

2- daily evaluation
3- Reports writing

C. Thinking Skills

C1.Linking of theoretical and practical knowledge in pharmacology science
C2.Working in team to analysis and perform experiments
C3.Ability of discussion data and reaching conclusion
C4.

Teaching and Learning Methods

Problem learning
Quizzes
Oral examination

Assessment methods

Revision of previous knowledge
Feed back evaluation
Duties for reports

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

D1.Drug knowledge

D2.Dosing manipulation
D3.Laboratoryanimals handling
D4. Drug formulation and preperations

Week	Unit/Module or Topic Title	Laboratory work	hours
	Principles of pharmacology	-General principle and definition	
	Principles of pharmacology	-Drug forms	
	Principles of pharmacology	-Metrology	
	Drugs acting on autonomic and somatic nervous system	-Dose calculation and Dilution	
	Drugs acting on autonomic and somatic nervous system	Animal handling and different dosing	
	Drugs acting on autonomic and somatic nervous system	Prescription writing and preparation	
	Drugs acting on autonomic and somatic nervous system	Boric acid, Tincture iodine, lugols iodine, Potassium permanganate	
	Drugs acting on central nervous system	Zinc oxide ointment and cream, sulphur ointment.	
	Drugs acting on central nervous system	Antacid powder, linimentum turpentine	
	Drugs acting on central nervous system	Effect of route of administration on the rate of absorption	
	Drug acting on cardiovascular system and	Effect of ionization on absorption of drug (aniline).	
	Drug acting on cardiovascular system and	Chemical analysis of aniline	
	Drug affecting gastrointestinal function	Review	
	Drug affecting gastrointestinal function	Examination.	
	Drug affecting gastrointestinal function	-Role of interaction on metabolism of pentobarbitone in kinetic	
	Autacoids and anti-inflammatory drugs	-role of drug interaction pentobarbitone sleeping effect	
	Autacoids and anti-inflammatory drugs	Anagesics	

	Autacoids and anti-inflammatory drugs	effect of autonomic drug on eye pupil	
	Dermatopharmacology	effect of autonomic drugs on rhythmic motility of isolated rabbit duodenum	
	Chemotherapy of microbial diseases	effect of autonomic drugs on isolated uterus in mice.	
	Chemotherapy of microbial diseases	demonstration of some preparation drugs in large animal.	
	Chemotherapy of microbial diseases	diuretics in sheep	
	Chemotherapy of parastic disease	analysis of urine sample	
	Chemotherapy of parastic disease	cyanide poisoning and treatment.	
	Chemotherapy of parastic disease	LD50safety of drug .	
	Drug affecting renal function and fluid-	-Review	
	Drug affecting renal function and fluid-	Examination.	
	Drug affecting the respiratory system		
	Drug affecting the respiratory system		
	Endocrine pharmacology and hormones		
	Endocrine pharmacology and hormones		

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	**Lippincotts pharmacologyHowland R.D and ycekM.J** ➢ Lectures
Special requirements (include for example workshops, periodicals, IT software, websites)	

Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

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1. Teaching Institution	
2. University Department/Centre	College of Veterinary medicine
3. Course title/code	Toxicology/ TOX 3201
4. Programme(s) to which it contributes	Bachelor in general veterinary medicine and surgery
5. Modes of Attendance offered	
6. Semester/Year	Tow semester/ year
7. Number of hours tuition (total)	course of 2 credits ,theory :2hours / week. in a total of 15 weeks/ semester=

	60 hours/year
8. Date of production/revision of this specification	
9. Aims of the Course	
.	
Aim and mission of toxicology is to identify potential harmful effects of chemical compounds to humans, animals and the environment, and to provide for their prevention and treatment. Appropriate experimentation and expert judgment allow to minimize the probability of the occurrence of adverse effects, which in the past have sometimes been of catastrophic dimension. Toxicology is a multidisciplinary science based upon Physiology, Biochemistry, Molecular Biology, Chemistry, Pharmacology, Pathology, Epidemiology and several others.	

B. Subject-specific skills
B1.Principles of drugs formulation and dosing
B2.Preparation of some formulated drugs
B3.Handiling of laboratory animals and performing some experiment in pharmacology

Teaching and Learning Methods

Lectures
Practical experiments
Duties assess and analysis of results

Assessment methods

-١Examination:
Written mid-term
Written final –term
Practical final –term
Oral Examination
Course assessment weight for annual system (100%)

Mid. semester		Final Examination	
theoretical	Laboratory work	theoretical	Laboratory work
%٢٥	%١٥	%٢٠	%٤٠

2- daily evaluation 3- Reports writing
C. Thinking Skills C1.Linking of theoretical and practical knowledge in pharmacology science C2.Working in team to analysis and perform experiments C3.Ability of discussion data and reaching conclusion C4.
Teaching and Learning Methods
Problem learning Quizzes Oral examination
Assessment methods
Revision of previous knowledge Feed back evaluation Duties for reports

D. General and Transferable Skills (other skills relevant to employability and personal development) D1.Drug knowledge D2.Dosing manipulation D3.Laboratoryanimals handling D4. Drug formulation and preperations

11-course contents		
Week	Unit/Module or Topic Title	hours
	Concepts and terminology	٢
	Toxicokinetics	٢
	Antidotes and general treatment of poisoning	٢
	Diagnostic aspects of toxicology	٢
	Insecticides	٢
	Herbicides	٢
	Metals and minerals	٢
	Mycotoxins	٢
	Feed – associated toxicants	٢
	House-hold and industrial products	٢
	Plants	٢
	Biotoxins	٢
	Environmental pollution with toxicants	٢
	Pharmaceuticals	٢
	Genotoxicology	٢

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	**Lippincotts pharmacology Howland R.D and ycekM.J** Lectures
Special requirements (include for example workshops, periodicals, IT software, websites)	
Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions