



كلية الطب البيطري

وحدة ضمان الجودة والإعتماد

جامعة جنوب الوادي

Course Specifications

University: south valley university

Faculty: veterinary medicine

Course Specifications

Programme(s) on which the course is given: **Bachelor of Veterinary Sciences.**

Major or Minor element of programmers: Major

Department offering the programme: **Pharmacology department**

Department offering the course: **Pharmacology department**

Academic year / Level: **Third Year, 1st semester**

Date of specification approval:

A- Basic Information

Title: **General Veterinary Pharmacology**

Code: **314**

Credit Hours: **Lecture: 3 hours/week**

Practical: 2 hours/week

Total: 5 hours/week

B- Professional Information

1 – Overall Aims of Course

to provide the students with a basic education about general pharmacology (pharmacokinetics and pharmacodynamics), pharmacology of systems, chemotherapy and drug toxicity.

2 – Intended Learning Outcomes of Course (ILOs):

a- Knowledge and understanding:

Graduate of veterinary medical programme must acquire the following Knowledge and understanding:

- 1- The terms relating to pharmacology.
- 2- The pharmacokinetics and pharmacodynamics.
- 3- The List and classify common drugs used in veterinary medicine and understand actions, mechanism of action, adverse effects and precautions for use of each drug.
- 4- the indications and contraindications of the principal drugs.

- 5- the interactions between drugs.
- 6- the drug residues and how to minimize their hazard effects.
- 7- how to deal with a case of drug toxicity.

b- Intellectual Skills:

Graduate must have the ability to:

- 1- Understand the use of drugs, adverse effects and antidotal therapy.
- 2- Be familiar with the advantages and disadvantages of chemotherapeutic agents.
- 3- Select the drug of choice.
- 4- Be familiar with drug-drug and food-drug interactions.
- 5- Be familiar with contraindications of drugs.
- 6- Be familiar with drug residues and the hazard effects on human.

c- Professional and Practical Skills:

Graduate must attain the capacity to:

- 1- Be familiar with the many types of drug forms available.
- 2- Be familiar with the routes and techniques of drug administration.
- 3- Have knowledge about the systems of measurements and understand how to perform conversions using the metric system and other systems of measurements as well as understand how to perform dosage calculations.
- 4- Know what is involved in preparing a prescription and dispensing.
- 5- Discuss in basic terms the actions and mechanisms by which the drugs produce their effects.

d- General and Transferable Skills:

Graduate must have the ability to:

1. Be familiar with all drugs administered and dispensed.
2. Have information about how medications should be administered, why it has been prescribed, and any adverse reactions that may occur.
3. Select the optimal route of drug administration to obtain the maximal bioavailability.
4. Describe how drugs affect the body.
5. Understand the clinical indications for the drugs.

3- Contents:

Topic		No. of hours	Lecturer	Tutorial/ Practical
Routes of drug administration Absorption, Distribution and Bioavailability of drugs.	General Pharmacology	1.5	Dr. Ashraf	
Sympathomimetic drugs.	Drugs act on Autonomic Nervous System.	1.5	Dr. Hazem	
Drugs Biotransformation.	General Pharmacology.	1.5	Dr. Ashraf	
Sympatholytic drugs.	Drugs act on Autonomic Nervous System.	1.5	Dr. Hazem	
Drugs excretion (Elimination) and drug residues.	General Pharmacology.	1.5	Dr. Ashraf	
Parasympathomimetic drugs.	Drugs act on Autonomic Nervous System.	1.5	Dr. Hazem	
Pharmacodynamics.	General Pharmacology.	1.5	Dr. Ashraf	
Parasympatholytic drugs.	Drugs act on Autonomic Nervous System.	1.5	Dr. Hazem	
Factors affecting on dose size and types of doses.	General Pharmacology.	1.5	Dr. Ashraf	
Ganglionic nicotinic agonists and antagonists. Neuromuscular blocking drugs.	Drugs act on Autonomic Nervous System.	1.5	Dr. Hazem	
Drug / drug interaction.	General Pharmacology.	1.5	Dr. Ashraf	
Autacoids and their antagonists.	Autacoids	1.5		
Cerebral, medullar and Spinal cord stimulants.	Drugs act on CNS.	1.5	Dr. Ashraf	
Steroidal anti-inflammatory drugs.	Anti-inflammatory drugs.	1.5	Dr. Hazem	
Sedatives and Hypnotics. Anticonvulsants.	Drugs act on CNS.	1.5	Dr. Ashraf	
Drugs acting on the heart.	Drugs act on cardiovascular system.	1.5	Dr. Hazem	
Tranquilizers	Drugs act on CNS.	1.5	Dr. Ashraf	
Drugs acting on blood vessels	Drugs act on cardiovascular system.	1.5	Dr. Hazem	
Narcotic analgesics	Drugs act on CNS.	1.5	Dr. Ashraf	
Drugs acting on blood.	Drugs act on cardiovascular system.	1.5	Dr. Hazem	
Non narcotic analgesics.	Drugs act on CNS.	1.5	Dr. Ashraf	
Preanaesthetic medications and general anaesthesia .	General anaesthesia.	1.5	Dr. Ashraf	
General anaesthetic drugs.	General anaesthesia.	1.5	Dr. Ashraf	
Local anaesthesia and local anaesthetics.	Local anaesthesia.	1.5	Dr. Ashraf	
Total	3	36		

Topic	No. of hours	Demonstrator
Sources of drugs	2	Dr. Ashraf Dr. Hazem Reda saber
Laboratory animals	2	Dr. Ashraf Dr. Hazem Reda saber
Action of autonomic drugs on isolated perfused rabbit's intestine	2	Dr. Ashraf Dr. Hazem Reda saber
Demonstration of the mode of action and site of action of an unknown drug on isolated rabbit's intestine	2	Dr. Ashraf Dr. Hazem Reda saber
Demonstration of the effect of autonomic drugs on toad's heart	2	Dr. Ashraf Dr. Hazem Reda saber
Demonstration of the mode and site of action of an unknown drug on the heart	2	Dr. Ashraf Dr. Hazem Reda saber
Demonstration of the site and mode of action of an unknown provided on isolated toad's	2	Dr. Ashraf Dr. Hazem Reda saber
Effect of Drugs on uterine muscles	2	Dr. Ashraf Dr. Hazem Reda saber
Effect of neuromuscular blockers on the isolated rectus abdominis of the toad's	2	Dr. Ashraf Dr. Hazem Reda saber
Effect of locally instilled drugs on the rabbit's eye.	2	Dr. Ashraf Dr. Hazem Reda saber
Demonstration of the mode of action of unknown drug that produce mydriasis on topical application of rabbit's eye.	2	Dr. Ashraf Dr. Hazem Reda saber
Central Nervous Stimulants General anaesthesia	2	Dr. Ashraf Dr. Hazem Reda saber
Total	24	

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Teaching and Learning Methods

4.1- Overhead Projector

4.2- Slides

5- Student Assessment Methods

5.1 work (periodical Exams and MCQ to assess knowledge and intellectual skills).

5.2- Practical exam to assess professional and practical skills.

5.3- Oral exam to assess intellectual skills.

5.4- Written exam to assess knowledge and intellectual skills.

Assessment Schedule

Assessment 1	semester work	week 4, 6, 8, 10,
Assessment 2	practical exam	week 13
Assessment 3	Oral exam	week 15
Assessment 4	Written exam	week 15

Weighting of Assessments

Mid-Term Examination	
Semester Works	20%
Practical Examination	15%
Oral Examination	15%
Final-term Examination	50%

Total	100%
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6- List of References

6.1- Course Notes

Lectures of Pharmacology

6.2- Essential Books (Text Books)

1- Pharmacology for Veterinary Technicians. Mosby-Year Book, Ins.USA

2- Veterinary Applied Pharmacology and therapeutics. Brander, G. C.; Pugh, D. M. and Bymater, R.J., English Language Book Society and Longman, London.

3-Veterinary Pharmacology and Therapeutics, 7th Edition , edited by H.Richard Adams, Iowa State University Press/ Ames.

6.3- Recommended Books

6.4- Periodicals, Web Sites, ... etc

1- J. Vet. Pharmacology and Therapeutics.

2- Am. J. Vet. Res.

7- Facilities Required for Teaching and Learning

1- Data Show.

2- Instruments for drug assay.

Course Coordinator:

Dr. Ashraf El Ghoneimy and Dr. Hazem Shaheen

Head of Department:

Date: