Specification for Pharmacology course
2019/2020

A-Affiliation

1.	**Relevant program**	Bachelor of Veterinary Medical Science (BVMSc)
2.	**Department offering the course**	Pharmacology

Date of specification approval: ministerial decree No. 1727 on 26/4/2017
(Approved in this template by the department council on 1/10/2019**)**

B- Basic information

1.	**Course title**	Pharmacology
2.	**Course code**	301 (A) I
3.	**Level**	3rd year
4.	**Semester**	First semester
5.	**Total hours**	5
6.	**Lecture hours**	2
7.	**Practical hours**	3

C-Professional Information

1- Course learning objectives

Providing students with a basic information about drugs, their properties, actions and modes of actions on different body systems in healthy and diseased conditions (General Pharmacology and Systemic Pharmacology)

2- Intended learning outcomes of the course (ILOs):

a- Knowledge and understanding

After successful completion of the course the students should be able to:

a1- Mention sources of drugs and the active principles present in such sources
a2- Determine doses of different drugs and their routes of administration
a3-Define the general drug actions and modes of actions
a4- Define the ways of drug absorption, distribution, metabolism and excretion
a5- Describe different drug groups affecting different body systems
a6- Prescribe a drug for treating a diseased condition
a7- Identify toxic symptoms of a drug given in a large dose and to treat such condition

b- Intellectual skills

After successful completion of the course the students should be able to:

b1- Choose possible drugs for curing a case.
b2- Decide the best drug from the group for curing the case.
b3-Describe to the owner or the patient the different properties of the selected drug

c- Professional and practical skills

After successful completion of the course the students should be able to:

c1- demonstrate different routes of administration of drugs.

c2- demonstrate different drug actions on experimental animals

c3- demonstrate different drug actions on isolated organs

d- General and transferable skills

After successful completion of the course the students should have the following skills

d1- searching skill.

d2- problem solving skill.

d3-Being effective member in pharmacology teams in drug agencies, research institutes and pharmaceutical companies

3- Course contribution in the program ILOs:

Course ILOS		Program ILOS
A	**Knowledge and understanding**	a^{8}
B	**Intellectual skills**	b^{5}
C	**Professional and practical skills**	c^{5}
D	**General and transferable skills**	$d^{1,6}$

3.1- Course contents:

Topic	**Lecture hours**	**Practical hours**
General Pharmacology	**10**	**12**
Systemic Pharmacology	**20**	**33**
Total hours	**45**	**45**

The midterm and practical exams are included during the semester

3.2- ILOs matrix:

Topic	A) Knowledge and understanding	B) Intellectual skills	C) Professional and practical skills	D) General and transferable skills
General Pharmacology	a1,a2,a3,a4	,b1,b2	,c1,c2	,d1,d2,d3
Systemic Pharmacology	,a5,a6,a7	,b3	,c3	,d1,d2,d3

4- Teaching, learning and assessment methods:

ILOs		Teaching and Learning methods							assessment method				
		L	P&M	D	P	Ps	Bs	FV	semester	midterm	oral	practical	written
and understandin	a1	x	x	x	0		x	0	x	x	x	0	x
	a2	x	x	x	0		x	0	x	x	x	0	x
	a3	x	x	x	0		x	0	x	x	x	0	x
	a4	x	x	x	0		x	0	x	0	x	0	x

	a5	x	x	x	0		x	0	x	0	x	0	x
	a6	x	x	x	0		x	0	x	0	x	0	x
	a7	x	x	x	0		x	0	x	0	x	0	x
Intellectual skills	b1	x	x	x	0	x	x	x	x	x	x	0	x
	b2	x	x	x	0	x	x	x	x	0	x	0	x
	b3	x	x	x	0	x	x	x	x	0	x	0	x
Professional and practical skills	c1	0	x	x	x	x		x	x	0	x	x	0
	c2	0	x	x	x	x		x	x	0	x	x	0
	c3	0	x	x	x	x		x	x	0	x	x	0
General skills	d1	0	x	x			x		x	0	x	0	x
	d2	x	0			x	x	x	x	0	x	0	x
	d3	0	0	x	x			x	x	0	x	0	0

L **:Lecture,** P&M**: Presentations & Movies,** D&S: **Discussions & Seminars PT: Practical,** Ps: **Problem solving,** Bs: **Brain storming, FV :field visit**

5- Assessment timing and grading:

Assessment method	timing	grade
Semester work	Around semester	15
oral exam	End of semester	
Mid-term exam	6th week	15
Practical exam	14th week	20
Written exam	End of semester	50
total		100

6- List of references

6.1- Course notes:

Pharmacology & Therapeutics for Veterinary Medical Students (2007) the Staff of Pharmacology Department, Al-Andalus Press Agency, Egypt

6.2- Essential books (text books)

- Fiona Cunningham (2010) Comparative and Veterinary Pharmacology.
- Robert Bill (2009) Medical mathematics and dosage calculations for veterinary professionals
- Nicholas H. Booth (2008) Jones veterinary pharmacology and therapeutics
- Amand. H. Rock (2007) veterinary pharmacology

6.3- Recommended books

- Course note.
- Fiona Cunningham (2010) Comparative and Veterinary Pharmacology.
- Robert Bill (2009) Medical mathematics and dosage calculations for veterinary professionals
- Nicholas H. Booth (2008) Jones veterinary pharmacology and therapeutics.

6.4- Periodicals, Web sites, . . . etc

- Pharmacology Research.
- Journal of Vet. Pharmacology and Therapeutics.
- British Journal of Pharmacology

- http://www.fda.gov (Food & Drug Administration web site)
- http://www.aspet.org/public/pharm_resources/default.html (Pharmacology resources)
- http://www.merckvetmanual.com (Veterinary encyclopedia)

7- Facilities required for teaching and learning

- Teaching hall.
- Pharmacology laboratory.
- Power Lab. unit with force and pressure transducers, baths of different capacities.
- HPLC
- Spectrophotometer
- Shpygmomanometer
- Central laboratory

Course coordinator: **Prof. Dr.** ASHRAF ABDEL HAKIM EL-KOMY

Head of department **Prof. Dr.** ASHRAF ABDEL HAKIM EL-KOMY

Signature ……

Date 1/10/2019