

## Course Specification Academic Year (2024-2025)

## 1- Basic Information

University	Beni-Suef	
Faculty	Veterinary Medicine	
Department	Pharmacology	
المقرر يتم تدريسه ضمن برنامج بكالوريوس الطب البيطرى لائحة ساعات معتمدة ٢٠٢٢		

Course Title:	Pharmacology - part 1			
Course Code:	PHA.313			
Academic Year:	2024-2025 – Level 3, First semester.			
<b>Program Title:</b>	Bachelor degree of Veterinary Medicine (BVM)			
<b>Responsible Department:</b>	Department of Pharmacology			
Credit hours/week:	3 hours (lecture: (2) - practical: 1(2).			
Internal evaluator:	Prof Dr./ Abd El Naser Abd El fatah , Beni-Suef University			
External evaluator:	Prof Dr./ Hosny Awad El-Banna , Cairo University			
Approval date:	تم اعتماد توصيف المقرر في مجلس القسم رقم () بتاريخ 03/ 99/ 2019 تم اعتماد توصيف المقرر في مجلس الكلية رقم () بتاريخ / /			

### 2- PROFESSIONAL INFORMATION:

#### **Overall aims of the course:**

### This course aims to:

Provide students of the third academic year with data enable the student to be able to;

- 1-Recognize pharmacokinetics and pharmacodynamics of drugs affecting different systems of the body.
- 2- Set the side effect and toxicity of the drugs
- 3- Calculate the correct doses of different drugs.
- 4-Choose the correct route of drug administration.
- 5-Choose the best suitable drugs for treating different diseases.
- 6-Describe different drug sources.

## 3- INTENDED LEARNING OUTCOMES OF THE COURSE (ILOs):

## a- Knowledge and understanding:

By the end of this course the student should be able to:

- **a1.** Distinguish pharmacokinetics and pharmacodynamics of drugs.
- **a2.** Recognize drugs affecting ANS, CNS, Reproductive system (Autacoids and reproductive Hormones), Urinary system, Respiratory system, Digestive system, cardiovascular system, Skin and eye.

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### **b- Intellectual skills:**

## By the end of this course the student should be able to:

- **b1.** Formulate different prescriptions for treating diseases.
- **b2.** Suggest certain drugs for treating diseased cases

## c- Professional and practical skills:

## By the end of this course the student should be able to:

- c1. Perform different route of administration of living laboratory animals with different drugs.
- c2. Perform different pharmaceutical drug forms necessary for treatment certain diseases.
- c3. Detect the site of action of different drugs
- **c4.** Detect the active principles present in plants.

#### d- General and transferable skills:

## By the end of studying the course, the student should be able to:

- **d1.** Work in a group and manage time.
- d2. Communicate with drug companies, pharmacists and the friends in the career.
- **d3.** Utilize computers and internet for research work.

## 4- Course Contents and Topics:

Week	Topics			No. of credit hours	
	Lecture	<b>Practical</b>	Lecture	<b>Practical</b>	
W1,2,3	*General pharmacology	Drug sources, Drug administration, Active principles, Pot.iodide excretion	5	6	
W3,4,5	*Drug affecting Autonomic Nervous System	Isolated intestine, Isolated uterus , Site oF action	5	9	
W6,7	* Drug affecting Central Nervous System  Strychnine and caffeine, Anaesthetic&Hypnotic,		5	12	
<b>W7</b>	Midterm exam	-			
W8	* Drug affecting Central Nervous System	Volatile&InFiltration anaesthesia, Corneal&nerve blocK anesthesia			
W9	* Drug affecting Reproductive System	-	2	-	
W10	* Drug affecting Skin and Eye	Atropine, Eserine, Local Anesthesia,	2	9	
W11	* Drug affecting Urinary System	-	2	-	
W12	* Drug affecting Cardiovascular System	-	2	-	
W13	* Drug affecting Respiratory System	-	1	-	
W13	* Drug affecting digestive system	-	2		
	Total		26	36	



## 5-Teaching and Learning Methods:

5.1. Lectures (brain storming and discussion) in which one or more of the following facilities are used:

5.1.1.

- 5.2. Laboratory sessions in which one or more of the following facilities are used:
  - **5.2.1.** Tutor presentation followed by students' small group sessions.
- 5.3. Independent (laboratory and home assignments supervised by tutors)
  - **5.3.1.** Writing essays and assignments (computer researches and faculty library attendance).
  - **5.3.2.** Group discussion.

## 6- Teaching and Learning Methods for Students with Disabilities:

N.B. Students with physical disabilities are non-applicable in the faculty.

## While students with learning difficulties:

- -The students are encouraged to contact department staff members in their announced office hours to discuss their individual needs for learning accommodation that may affect their ability to participate in course activities or meet the course requirements.
- -At end of the practical sessions, overall courses revision was done for all student groups to overcome the problem of non-attendance in any practical session.

## **7-Students Assessment:**

## 7.1. Assessments methods:

Matrix alignment of assessment methods/measured ILOs:

Method	Matrix alignment of the measured ILOs/Assessments methods				
	K&U	I.S	P&P.S	G.S	
Midterm exam	a1-a2	b1-b2	c1, c2, c3, c4	-	
Written exam	a1-a2	b1-b2	c1, c2, c3, c4	-	
Practical exam	a1-a2	b1, b2	c1, c2, c3, c4	d1	
Oral exam	a1-a2	b1-b2	c1, c2, c3, c4	-	

### 7.2. Assessment schedules/semester:

Method	Week(s)			
Midterm exam	At the 7 <sup>th</sup> week, managed by faculty administration.			
Written exam	At the 15 <sup>th</sup> week, managed by faculty administration.			
Practical exam	At the 14 <sup>th</sup> week, managed by department administration.			
Oral exam	At the 15 <sup>th</sup> week, managed by department administration.			

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### 7.3. Weight of assessments:

Assessment	Degrees	Weight
Midterm exam	20	20%
Written exam.	50	50%
Practical exam.	20	20%
Oral exam.	10	10%
Total	100	100%

## 8- List of References:

## 8.1. Department notes:

**8.1.1.** \* Notes of pharmacology (part I ) by staff member.

## 8.2. Essential textbooks:

# (Available in library of Faculty of Veterinary Medicine, Beni-Suef University)

\*Walker, D.G.; Renwick, A.G. and Hillier, K. (2001):

Medical pharmacology and therapeutics

First Ed. University of Southampton printed in Spain

\*Mehdi Borougerdi. (2002):

Pharmacokinetics: Principles and applications.

Dep. of Pharmaceuitical Science-School of pharmacy, North Easten Univ. Bostom.

## 8.3. Recommended textbooks: (Available online via GOOGLE search).

Available in library of Faculty of Veterinary Medicine, Beni-Suef University)

\*Stockly, I.H. (1999):

Drug interactions, 5th Ed.

University of Nottingham Medical School, Nottingham, UK

\*Goodman, L.S. and Gilman, A. (2001):

The pharmacological basis of therapeutics, 10th Ed.

Iowa State University Press USA

\*Nicholas H. Booth and E. Mcdonald (2005):

Jones Veterinary Pharmacology and Therapeutics, 5th Ed, Pharmaceutical press publisher

\*Robert L. Bill (2006):

Clinical Pharmacology and Therapeutics For The Veterinary Technician, 3rd Ed. Vet.

Physiology and pharmacology. School of Vet. Medicine. Purdue Univ. indiana

\*S. Giguere. J. F. (2006):

Antimicrobial therapy in Veterinary Medicine, 4th ed.

Black well publishing

\*Bertram. G. (2007):

Basic and clinical pharmacology. 10th .ed.

Dep. of cellular and molecular pharmacology. Unv. of calfornia, San Francisco.

<sup>\*</sup> Note of practical pharmacology, faculty of veterinary medicine, Beni-Suef University.

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## 8.4. Journals, Websites ...... etc.

### **8.4.1. Journals:**

- \*Journal of Pharmaceutical Science
- \*Journal of Veterinary Pharmacology and Therapeutics
- \*Antimicrobial Agents and Chemotherapy
- \*British Journal of Pharmacology
- \*The Pharmacological Basis of Therapeutics
- \*Journal of Antimicrobial Chemotherapy
- \*Journal of Antibiotics

**8.4.2.** Websites

http//www.sciencedirect.com/scince ncbi.nlm.nih.gov/entrez/query.fcgi

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Course Coordinator Prof. dr. / Arafa Meshref Head of the department Prof. dr. /Abeer Mohamed

## MATRIX OF COURSE CONTENTS AND INTENDED LEARNING OUTCOMES (ILOS)

			Intended learning outcomes (ILOs.)			
Course	Topics	Week	K&U.S	I.S	P&P.S	G&T.S
			(a)	<b>(b)</b>	(c)	(d)
Third Year – First Semester – PHA:3130 Pharmacology (3 hours/week (lect. 2 hours/week - pract. (1)2 hours/week)	*General pharmacology	1,2,3	a1	-	-	
	*Drug affecting Autonomic Nervous System.	3,4,5	a2	<b>b1</b> , <b>b2</b>	c1, c3, c4	
	* Drug affecting Central N. Sys.	6,7,8	a2	b1, b2	c3	
	* Drug affecting Reproductive Sys.	8,9	a2	b1, b2	c3	d1-d3
	* Drug affecting Skin and Eye	9,10	a2	b1, b2	-	u1-u3
	* Drug affecting Urinary System.	10,11	a2	b1, b2	c1, c2	
	* Drug affecting Cardiovascular System.	11,12	a2	b1, b2	c1, c2	
	* Drug affecting Respiratory System.	12	a2	b1, b2	c1, c2	
	* Drug affecting digestive system	13	a2	b1, b2	c1, c2	