





# Specification for anesthesiology and radiology course 2019/2020

# A-Affiliation

1.	Relevant program	Bachelor of Veterinary Medical Science (BVMSc)
2.	Department offering the course	Surgery anesthesiology and radiology

**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	Anesthesiology and Radiology
2.	Course code	409 (B) II
3.	Level	4 <sup>th</sup> year
4.	Semester	Second semester
5.	Total hours	5
6.	Lecture hours	2
7.	Practical hours	3

# **C-Professional Information**

#### 1- Course learning objectives

The aim of the course is to provide the students with a basic education about veterinary anesthesiology and to enable them to gain the skills and attitudes required for sedation, analgesia and anesthesia of domestic animals.

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

#### a- Knowledge and understanding

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

- al- Identify the basic knowledge about surgical anatomy.
- a2- Mention the basis of local analgesia and its potentiation.
- a3- Understand the basis of regional analgesia and its adverse effects.
- a4- Familiarize of different types of premedication and the general anesthesia and its stages and different types of general anesthetic agent.
- a5- Identify the basis of radiology and ultrasonography and its applications

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

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

- b1- Decide how to prepare the animal for local, regional or general anesthesia
- b2- Determine the appropriate method of anesthesia suitable to different techniques of operations and the animal species
- b3- Differentiate between the clinical signs of anesthesia and







over dosage of anesthesia

b4- Judge the more suitable time of anesthesia for interference in the different surgical conditions.

b5- Choose the suitable diagnostic methods to reach an accurate diagnosis

# c- Professional and practical skills

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

- c1- Perform an accurate anesthetic method.
- c2- Prepare of the animal for regional or general anesthesia.
- c3- Practice the correctly positioned the needle in different types of regional analgesia.
- c4- Decide the suitable method of anesthesia.
- c5- Prepare and interpret a radiographic and ultrasonographic image

## d- General and transferable skills

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

- d1- Solve problems associated with pet animal diseases.
- d2- Communicate with other colleagues for reaching diagnosis.
- d3- Cooperate with other veterinary hospitals, clinics and units in the field of pet animal practice.
- d4- Work in a team during group assignments

# 3- Course contribution in the program ILOs:

Cor	irse ILOS	Program ILOS
Α	Knowledge and understanding	a <sup>10</sup>
В	Intellectual skills	b <sup>8</sup>
С	Professional and practical skills	$c^{3,9,10}$
D	General and transferable skills	$d^{1,2,3,5}$

#### 3.1- Course contents:

Topic	Lecture hours	Practical hours
Basis and terminology	$\sim 2$	3
Local analgesia	2	6
Regional analgesia about the head	2	5
Regional analgesia about the limb	2	5
Paravertebral analgesia	2	3
Epidural analgesia	2	3
Narcosis	2	-
Pre-medications	2	-
General anesthesia	3	6
Principles of diagnostic imaging	2	3
Physics of x-ray	1	3
Introduction to the radiographic interpretation	4	5







Basis and clinical application of	4	3
Ultrasonography		
Total	30	45

# The midterm and practical exams are included during the semester

# 3.2- ILOs matrix:

5.2- ILOS Matrix.				
Topic	A)	B)	C)	D)
	Knowledge and	Intellectual	Professional and	General and
	understanding	skills	practical skills	transferable
				skills
Basis and	a1-a2	b1-b4	c1- c4	d1-d2-d3-d4
terminology				
Local analgesia	a1-a2	<b>b1-b4</b>	c1- c4	d1-d2-d3-d4
Regional	a1- a3	b1-b4	c1- c4	d1-d2-d3-d4
analgesia about		Indiad		
the head				
Regional	a1- a3	<b>b</b> 1- <b>b</b> 4	c1- c4	d1-d2-d3-d4
analgesia about	1.	4 1	20	
the limb	/ / /	4	6	
Paravertebral	a1- a3	b1-b4	c2-c3-c4	d1-d2-d3-d4
analgesia				
Epidural	a1- a3	b1-b4	c2-c3-c4	d1-d2-d3-d4
analgesia				
Narcosis	a1- a4	<b>b2- b4</b>	c2-c3-c4	d1-d2-d3-d4
Pre-medications	a1- a4	<b>b2- b4</b>	c2-c3-c4	d1-d2-d3-d4
General	a1- a4	b2- b4	c2-c3-c4	d1-d2-d3-d4
anesthesia	7 1/ 1/	~ ~ ~		7
Principles of	a1- a5	b1-b5	c1-c5	d1-d2-d3-d4
diagnostic				
imaging	3			
Physics of x-ray	a1-a2	b1-b4	c1- c4	d1-d2-d3-d4
Introduction to	a1-a2	b1-b4	c1- c4	d1-d2-d3-d4
the radiographic				
interpretation				
Basis and clinical	a1- a3	b1-b4	c1- c4	d1-d2-d3-d4
application of				
Ultrasonography				

# 4- Teaching, learning and assessment methods:

	Teaching and							assessment method				
ILOs	Learning methods											
	L	P&M	D	P	Ps	Bs	Ft	semester	midterm	oral	practical	written
al	X	X	X	0		X	0	X	X	X	0	X







					T -			_				_	
	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	X	X	0	X
	a5	X	X	X	0		X	0	X	X	X	0	X
ıal	b1	X	X	X	0	X	X	X	X	X	X	0	X
sctu Ils	b2	X	X	X	0	X	X	X	X	X	X	0	X
ellecti skills	b3	X	X	X	0	X	X	X	X	X	X	0	X
Intellectual skills	b4	X	X	X	0	X	X	X	X	X	X	0	X
	b5	X	X	X	0	X	X	X	X	X	X	0	X
nai cal	c1	0	X	X	X	X	0	X	X	0	X	X	0
rioressional and practical	c2	0	X	X	X	X	0	X	X	0	X	X	0
prac	c3	0	X	X	X	X	0	X	X	0	X	X	0
nd	c4	0	X	X	X	X	0	X	X	0	X	X	0
ı a	c5	0	X	X	X	X	0	X	X	0	X	X	0
al S	d1	X	0	X		X	0	X	X	0	X	X	X
General skills	d2	X	0	X	X	0	0	X	X	0	X	0	0
Ge	d3	0	0	X	X	0	0	X	X	0	X	0	0
	d4	0	X	X	0	0	0	X	X	0	X	0	0

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

# 5- Assessment timing and grading:

Assessment method	timing	grade
Mid-term exam and semester work	6 <sup>th</sup> week	15
Practical exam	14 <sup>th</sup> week	20
oral exam	End of semester	15
Written exam	End of semester	50
total	A A A A	100

# **6- List of references**

## 6.1- Course notes:

A concise guide of Veterinary Anesthesiology edited by staff members

# **6.2- Essential books (text books)**

- Teresa F. Sonsthagen (2011) Veterinary instruments and equipment: a pocket guide.
- Pramod Kumar (2009) textbook of veterinary anaesthesia.
- Lisa M. Lavin (2007) Radiography in Veterinary Technology
- Amresh Kumar k.(2005) Veterinary Surgical Techniques

## 6.3- Recommended books

- Course note.
- Lisa M. Lavin (2007) Radiography in Veterinary Technology.
- Kirby I. Bland (2002) the Practice of General Surgery.

# 6.4- Periodicals, Web sites, ... etc

• Journal of Veterinary Surgery.







- American Journal of Veterinary Medical Association.
- American Journal of Veterinary Research
- Veterinary Record
- www.ekb.eg

# 7- Facilities required for teaching and learning

- Equipped teaching hall.
- Equipped surgical laboratory.
- Equipped surgery room.
- Radiation unit
- Faculty teaching farm
- Faculty teaching hospital
- Training unit

Course coordinator: Prof. Dr ADEL ELAQRAA. Head of department Prof. Dr ADEL ELAQRAA

