



Course Specification

Anaesthesiology and Radiology

Benha University

Faculty of Veterinary Medicine

Programme on which the course is given: **Bachelor of Veterinary Medical Science**

Department offering the course: **Department of Surgery**

Academic year / Level: **4th Year** (Second Semester)

Date of specification approval: Ministerial Decree No 921, on 15/9/1987

Date of Dept approval: 16-1-2011

A- Basic Information

Title: Anesthesiology & Radiology **Code: Vet 0064 b**

Lecture: 2 hours

Practical: 3 hours

Total: 5 hours

B- Professional Information

1 – Overall Aims of Course:

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

2 – Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

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

- a1- Recognize the basic knowledge about surgical anatomy .
- a2- Realize 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 be able to:

- 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- Contents

Topic	No. of hours	Lecture	Practical
Basis and terminology	5	2	3
Local analgesia	5	2	3
Regional analgesia about the head	8	2	6
Regional analgesia about the limb	8	2	6

Paravertebral analgesia	5	2	3
Epidural analgesia	5	2	3
Narcosis	2	2	-
Pre-medications	2	2	-
General anesthesia	10	4	6
Principles of diagnostic imaging	5	2	3
Physics of x-ray	4	1	3
Introduction to the radiographic interpretation	10	4	6
Basis and clinical application of Ultrasonography	6	3	3
Total	75	30	45

4- content-ILOs matrix

Content	ILOs			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Basis and terminology	a1-a2	b1-b4	c1- c4	d1-d2-d3-d4
Local analgesia	a1-a2	b1-b4	c1- c4	d1-d2-d3-d4
Regional analgesia about the head	a1- a3	b1-b4	c1- c4	d1-d2-d3-d4
Regional analgesia about the limb	a1- a3	b1-b4	c1- c4	d1-d2-d3-d4
Paravertebral analgesia	a1- a3	b1-b4	c2-c3-c4	d1-d2-d3-d4
Epidural analgesia	a1- a3	b1-b4	c2-c3-c4	d1-d2-d3-d4
Narcosis	a1- a4	b2- b4	c2-c3-c4	d1-d2-d3-d4
Pre-medications	a1- a4	b2- b4	c2-c3-c4	d1-d2-d3-d4
General anesthesia	a1- a4	b2- b4	c2-c3-c4	d1-d2-d3-d4
Principles of diagnostic	a1- a5	b1-b5	c1-c5	d1-d2-d3-d4



imaging				
Physics of x-ray	a1- a5	b1-b5	c1-c5	d1-d2-d3-d4
Introduction to the radiographic interpretation	a1- a5	b1-b5	c1-c5	d1-d2-d3-d4
Basis and clinical application of Ultrasonography	a1- a5	b1-b5	c1-c5	d1-d2-d3-d4

5- Assessment-ILOS matrix

Assessment	ILOS			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Mid – Term exam	✓	✓	✓	
Practical exam	✓		✓	
Oral exam	✓	✓	✓	✓
Final term exam	✓	✓	✓	✓
Assignments and research	✓			✓

6– Teaching and Learning Methods

- 4.1- Cadavers.
- 4.2- Experimental animals.
- 4.3- CD's, slides and video tapes.
- 4.4- Demonstration on bone skeleton.

7- Student Assessment Methods



- 5.1 Practical exam to assess professional and practical skills.
- 5.2 Oral exam to assess knowledge and information and intellectual skills.
- 5.3 Written exam to assess knowledge, information and intellectual skills.
- 5.4 Assignments to assess management of clinical cases.

Assessment Schedule

Assessment 1	Assignment	6 th Week
Assessment 2	Midterm Exam	8 th week
Assessment 3	Practical exam	14 th Week
Assessment 4	Oral exam	15 th Week
Assessment 5	Final written exam	15 th week

Weighting of Assessments

Mid-Term Examination	5 %
Final-term Examination	50 %
Oral Examination	20 %
Practical Examination	20 %
Semester Work	5 %

Total **100%**

8- List of References

8.1- Course Notes

A concise guide of Veterinary Anesthesiology.

8.2- Essential Books (Text Books)

Dollar's Veterinary Surgery, J.J O' Connor, 1982

Veterinary Surgery, 1980, E. R Frank

Current Concepts in Veterinary Surgery, 1985, K. Fouad, M.Saleh and M. Shokry.

8.3- Recommended Books

Wright's Veterinary anesthesia, 1984.

8.4- Periodicals, Web Sites, etc

Journal of Veterinary Surgery.

American Journal of Veterinary Medical Association.

American Journal of Veterinary Research.

Veterinary Record.



Journal of veterinary anesthesia and analgesia

9- Facilities Required for Teaching and Learning

Surgical laboratory.

Anesthetic drugs .

Clinical Teaching cases.

Experimental and laboratory animals.

Data show and computer lab.

Course Coordinator: Dr. Atef Sayed Ahmed Abd Al-Galil

Head of Department: Pro. Dr. Samy Farghaly Ismail

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