

## (Surgery) Course Catalogue

**2023-2024**

College/ Institute	Shaqlawat Technical College	
Department	Veterinary-Morning	
Module Name	Veterinary Surgery	
Module Code	VES305	
Semester	3	
Credit	6	
Module type	Core	
Weekly hours	4	
Weekly hours (Theory)	( 2 )hr Class	( 3 )hr Workload
Weekly hours (Practical)	( 2 )hr Class	( 1 )hr Workload
Lecturer (Theory)	Kamaram Hussein Mohammed	
E-Mail	Kamaram.mohammed@epu.edu.iq	
Lecturer (Practical)	Botan	
Email		

# Course Book

- **Course overview:**

This course will focus on the Veterinary Technician's role in surgery. Students will work in teams to carry out the variety of duties associated with veterinary surgery. Emphasis is on sterile procedures and maintenance of operating room sterility, including the correct placement of resources and equipment. Knowledge of routine, typical companion animal surgeries and appropriate patient aftercare for client education are studied.

- **Course objective:**

- 1: to save the life of animal e.g intestinal obstruction.
- 2: to prolong the life of animal e.g malignant tumor.
- 3: recovery from diseases and injury e.g accident.
- 4: transplantation of organs e.g kidney transplantation.
- 5: economic purpose e.g castration, amputation of tail.
- 6: cosmetic purpose e.g ear trimming.
- 7: diagnostic procedure.
- 8: euthanasia.
- 9: making the less dangerous.

- **Student's obligation**

- 1-The student attention in all theoretical and practical lectures in academic year.
- 2-Completion of all tests.
- 3-Attendance in exams.
- 4-Write or prepare reports.

- **Forms of teaching**

lecture halls with data show equipment for lecture presentations, white board, overhead projector, posters

- **Assessment scheme**

- 6% Mid. Theory exam
- 10% Mid. practical exam
- 4% Quiz
- 40% Activity
- 25% final practical
- 15% final theory

- **Specific learning outcome:**

Upon successful completion of this course, the student will have reliably demonstrated the ability to:

1. Identify, create and maintain a sterile operating field.

2. Identify resource and equipment needs for common surgical procedures.
3. Calculate dosages and administer emergency drugs and peri-operative fluids as a complement to surgery as indicated.
4. Implement aseptic techniques to perform typical duties as a sterile surgical assistant.
5. Communicate effectively with clients in relation to pre and post-operative home care and follow up.
6. Correctly maintain and care for surgical instruments and ancillary equipment in the surgical suite.

**Course Reading List and References:**

- 1: Peter, J.Morris and A.Malt.1994. Oxford text book of surgery.
- 2: Oehem, F.W.1988.text book of large animal surgery
- 3:Slatter.D.1995.Text book of small animal surgery.
- 4:Fossum,T.W.1997.Small animal surgery.

- Course topics (Theory)	Week	Learning Outcome
General Surgical Considerations	1	Student be able to know the methods of sterilization and the considerations within the surgical operations.
The Wounds	2	Be able to know the types of wounds, symptoms and healing of wounds.
General Anesthesia	3	List of drugs of general anaesthesia and the techniques used to anaesthesia
Local Analgesia	4	List of drugs of local anaesthesia and the techniques used to anaesthesia
Fractures	5	Be able to know the types of fractures, symptoms and the treatment of fractures.
Burns and scalds	6	Be able to know the types of burns, symptoms and the care of burns.

Abscesses and Ulcers	7	Be able to know the types of abscesses and ulcers and symptoms.
Cysts and Hematoma	8	Be able to know the types of cysts and hematoma and symptoms.
Haemorrhage and Shock	9	Be able to know the types and symptoms of haemorrhage and care of shock.
Hernia	10	
Gangrene and Necrosis	11	
Laminitis	12	
	13	
	14	
<b>Practical Topics (If there is any)</b>	<b>Week</b>	<b>Learning Outcome</b>
General surgical instrument	1	Student be able to know the laboratory safety and components
Specifically surgical instrument	2	Be able to know the uses and types of instruments in laboratory
Antiseptic and disinfectants	3	Be able to know the blood group, counts of cells and morphology
Type of sutures materials	4	Be able to know about serological methods in diagnosing disease
Type of suturing and knots	5	Be able to know every types of culture media and the types of culturing
Training on suturing	6	Be able to know how to measure weights and volumes
Laparotomy in the dog	7	Be able to know the preparation of solutions
Rumenotomy in the sheep	8	Be able to know how to analysis of urine

Castration and dehorning	9	Be able to know how analysis the samples of internal parasites
Gastrotomy in the dog	10	Be able to know how analysis the samples of external parasites
Ear trimming in the dog	11	Be able to know the techniques of proteins assay
Hearnial repair	12	Be able to know the sampling and preparing of cells
	13	
	14	

**Examinations (question design):****Q1/****A- Write the uses of Tetracycline group****(12 Mark)**

- a. Respiratory infection
- b. Bacterial enteritis
- c. Urinary tract infection
- d. Rickettsial infection

**B- Local application route of drug administration****(12 Mark)**

1. Intramammry
2. Intravaginal
3. Intrarectal
4. Intraarticular
5. Ophthalmic
6. Inhalation

**Q2/ Enumerate the followings:****A- The types of disinfecting agents****(16 Mark)**

- 1- Phenols
- 2- Quaternary ammonium compounds
- 3- Aldehydes
- 4- Ethylene oxide
- 5- Alcohols

- 6- Halogens
- 7- Other agents
  - a- Hydrogen peroxide
  - b- Soaps

**B- The types of Diuretics**

**(12 Mark)**

- 1. Thiazides
- 2. Loop diuretics
- 3. Potassium-sparing diuretics
- 4. Carbonic anhydrase inhibitors
- 5. Osmotics

**Q3/**

**A- Classify the antibiotics according to the mechanism of action**

**(15 Mark)**

- 1. Inhibition of cell wall synthesis
- 2. Damage to the cell membrane
- 3. Inhibition of protein synthesis
- 4. Interference with metabolism
- 5. Impairment of nucleic acids

**B- Enumerate 3 drugs that used as Antinematodal drugs**

**(6 Marks)**

- 1- Thiabendazole
- 2- Oxibendazole
- 3- Mebendazole
- 4- Fenbendazole
- 5- Febantel
- 6- Levamisole
- 7- pyrantel pamoate
- 8- Dichlorvos
- 9- Piperazine
- 10- ivermectin
- 11- moxidectin

**C- Enumerate 2 drugs that used as Anticoagulant drugs**

**(4 Marks)**

- 1- Heparin
- 2- EDTA
- 3- Coumarin derivatives
- 4- Aspirin

Q4/

**A- Define the following:**

1- Antibacterial drugs (4 Marks)

Antibacterial: an agent that inhibits bacterial growth or impedes replication of bacteria or kills bacteria

2- Pharmacokinetics (4 Marks)

Pharmacokinetics: it is meaning the response of the tissue against the drugs

3- Drug (4 Marks)

**Drug**: it is any agent that be used to treatment sick (abnormal) tissue

4- Negative chronotropic drugs (5 Marks)

Negative chronotropic drugs: decrease heart rate by altering the rate of impulse formation at the SA node

**B- Write about expectorant drugs and give example (6 Marks)**

Expectorants

- Increase the flow of respiratory secretions to allow material to be coughed up from the lungs
- Increase the fluidity of mucus

Drugs:

Guaifenesin

**- Extra notes:**

**- External Evaluator**

**The outcome of course book evaluation is commonly more explicit and follows the principles and rules in general.**