College of Veterinary Science
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana

Advanced Training Course on Important Veterinary Clinical Procedures

Schedule

Date	Time	Topic	Department	Venue
Day1	9:00-10:00	Introduction to the different sections of Advanced Clinical Training	Surgery & Radiology	Surgery Committee room
		Selection of drugs for anaesthesia, dose calculation	Surgery & Radiology	Small Animal Clinic
	11:00-13:00	Preanesthestic assessment, discussion on minimum required laboratory tests and preanesthetic physical status to patient.	Surgery & Radiology	Small Animal Clinic
	13:00-14:00	Lunch		
	14:00-15:30	Surgeon preparation scrubbing, gowning and donning (closed gloving)	Surgery & Radiology	Small Animal Clinic
	15:30-17:00	Assemble anesthetic equipment, selection of breathing circuit, endotracheal tube, rebreathing bag, discussion on circle & bain system & leak test	Surgery & Radiology	Small Animal Clinic
Day 2	9:00-11:00	Premedication, IV catheter placement, admin of IV fluid, induction of anesthesia,	Surgery & Radiology	Small Animal Clinic
	11:00-13:00	Endotracheal intubation, connect patient to anesthesia machine, placing esophageal stethoscope	Surgery & Radiology	Small Animal OT
	13:00-14:00	Lunch		
	14:00-15:30	Demonstration of positioning of patient and use of proper radiographic techniques, including selection of appropriate views and structures/regions	Surgery & Radiology	Radiology Unit
	15:30-17:00	Radiation safety	Surgery & Radiology	Radiology Unit
Day 3	9:00-11:00	Monitoring using Doppler or oscillometric blood pressure monitor, transfer of patient to surgery area and maintenance of anesthesia, assessing depth of anesthesia	Surgery & Radiology	Small Animal Clinic
	11:00-13:00	Anesthesia record and recovery from anesthesia.	Surgery & Radiology	Small Animal Clinic
	13:00-14:00	Lunch		
	14:00-17:00	Discussion on major/minor anesthetic flaws during anesthesia section	Surgery & Radiology	Surgery Lab
Day 4	9:00-11:00	Observation of Soft tissue surgery & General Anesthesia	Surgery & Radiology	Small Animal Clinic
	11:00-13:00	Recovery from anesthesia its monitoring & discussion on anesthesia proforma	Surgery & Radiology	Small Animal Clinic
	13:00-14:00	Lunch		

	14:00-17:00	Patient preparation for Surgery	1. Surgery & Radiology 2. Vety Gynaecology	Small Animal Clinic
Day 5	9:00- 13:00	Observation of Soft tissue surgery & General Anesthesia	1. Surgery & Radiology 2. Vety Gynaecology	Small Animal Clinic
	13:00-14:00	Lunch		
	14:00-15:00	Discussion on Postoperative pain management, fatal flaws in surgery & how to prevent it.	Surgery & Radiology	Small Animal Clinic
	15:00-17:00	Radiographs of equine limbs in lame horses	Surgery & Radiology	Committee room
Day 6	9:00-11:00	Demonstration of thoraco- and abdominocenetesis in dog.	Veterinary Medicine	Small Animal Medicine OPD
	11:00-13:00	Demonstration of normal and abnormal heart sounds, skin scraping for suspected demodex	Veterinary Medicine	Small Animal Medicine OPD
	13:00-14:00	Lunch		
	14:00-17:00	Demonstration of cystocenetesis, urinary catheterization in male dog and jugular Venipuncture	Veterinary Medicine	Small Animal Surgery OPD
Day 7	9:00-11:00	Evaluation of the integrity of the cranial cruciate ligament on a dog, patellar reflex evaluation and describe how it is affected by a spinal lesion. Cranial nerve examination.	Surgery & Radiology	Small animal surgery OPD
	11:00-13:00	Schirmer tear test/ Fluorescein stain test and interpretion of the results, proprioceptive examination and interpretion of the results	Surgery & Radiology	Small animal surgery OPD
	13:00-14:00	Lunch		
	14:00-17:00	Proprioceptive examination and interpretion of results, fine needle aspirate and prepare a slide for analysis.	Surgery & Radiology	Surgery Department
Day 8	9:00-13:00	1. Perform an obstetrical examination (preparation of animal/ self). Identify presentation, posture, position 2. Correct mal presentation, posture, position 3. Place chains/ropes, Discuss alternative delivery plans, Post-delivery cow and calf care	Vety Gynaecology	Gynaecology Department
	13:00-14:00	Lunch		
	14:00-17:00	Prepare the cow for obstetrical examination Perform rectal examination and determine pregnancy status. Explain on what basis pregnancy status determination was made. On	Vety Gynaecology	Dairy farm

		the basis of the rectal examination, describe the response to prostaglandin administration, including the basis on which that determination was made (eg, ovarian structures), and discuss sequelae to prostaglandin administration.		
Day 9	9:00-11:00	Small Animal Clinical Case- case evaluation: History, visual examination, thorough and systematic physical exam.	Vety Medicine	Small Animal Med. OPD
	11:00-13:00	Small Animal Clinical Case- 1. Record all examination findings in a form, differential diagnosis list, Comprehensive diagnostic tests along with its justification and its interpretation, use of diagnostic tests to refine differential diagnosis list and arrive at most likely diagnosis. Develop therapeutic plan, follow up, preventive and control issues.	Vety Medicine	Small Animal Med. OPD
	13:00-14:00	Lunch		
	14:00-17:00	5 important clinical cases of dogs and cats each- Discussion on their: 1. Clinical evaluation 2. Therapeutic plan and appropriate follow up, preventive and control issues and developing the appropriate diagnosis.	Vety Medicine	Committee Room Medicine Department
Day 10	9:00-1:00	Catch and restrain the horse, determine the medical history, perform a distance and a physical examination, develop an initial problem list and differential diagnoses list, request appropriate diagnostic tests, interpret results of tests, determine the most likely diagnosis based upon history, physical examination, and diagnostic test results	Vety. Medicine	NCC Unit
	13:00-14:00	Lunch		
	14:00-15:30	In an adult cow, take history, do physical examination, develop diagnostic plan, interpret test results, do differential diagnosis, and give most appropriate diagnosis,	Vety Medicine	Instructional Livestock Farm Complex
	15:30-17:00	In an adult cow, do the following: 1.Therapeutic and management plan 2. Develop an appropriate prognosis 3.Competently discuss prevention/control issues 4. Competently discuss regulatory issues (eg, notifying state/federal health officials of reportable disease); public health issues (eg, zoonotic potential), withdrawal times.	Vety Medicine	Instructional Livestock Farm Complex
Day 11	9:00-13:00	1. Examine a lame horse. Discussing the history and then observing the horse at a walk	Surgery &	TVCC /

		and trot to determine the lame limb, how to differentiate fore- limb vs hind-limb lameness and how to determine left vs. right limb), perform appropriate flexion tests to localize the lameness. 2. Discuss Palmar/plantar digital, abaxial sesamoid, and low and high volar nerve blocks and associated principles (eg, landmarks, preparation, technique, desensitized areas, etc), joint block, imaging techniques.	Radiology	NCC Unit
	13:00-14:00	Lunch		
	14:00-17:00	1. Completely auscultate the thorax (cardiorespiratory system), using a rebreathing bag. 2. Place a support (aka standing, shipping) bandage. 3. Discuss how to safely perform a rectal examination. 4. Identify usual IM, IV, and SQ injection sites and perform an intravenous and intramuscular injection, using N.S.S. 5. Palpation of 20 important structures.	Vety Medicine	NCC Unit
Day 12	9:00-11:00	Discussion on Feeding/housing, Vaccination, Deworming, Dental care, Foot care in horses	Vety Medicine	TVCC / NCC Unit
	11.00-13:00	1. Perform a basic ophthalmic examination, using a direct scope. 2. Describe the horse for the purpose of positive identification for equine infectious anemia (EIA) testing, insurance examination, or interstate health certificates, as directed by the examiner. Identify appropriate needles and tubes for collection of blood sample for serum biochemistry, complete blood count, or equine infectious anemia test.	Vety Medicine	TVCC / NCC Unit
	13:00-14:00	Lunch		
	14:00-16:30	1. Estimate the age of the horse, and discuss and demonstrate rasping (floating) of the upper cheek teeth, using manual tools. 2. Describe how to perform abdominocentesis, including selection of needles/tubes.	Vety Medicine	TVCC / NCC Unit
Day 13	9:00-11:00	1. Place a halter on the cow and restrain the cow in a manner that would allow procedures to be performed safely on the head or neck. 2. Prepare the udder of the cow for routine milking 3. Obtain a milk sample from each quarter, perform California Mastitis Test (CMT) on	Vety Medicine	Dairy Farm

		the samples, and interpret the test results. 4. Prepare the udder and obtain a milk sample for bacterial culture; interpret bacterial culture results provided and communicate atherapeutic/management plan for the dairyman based upon the culture		
	11:00-13:00	In a cow, do the following: 1. Place a mouth gag and perform an examination of the oral cavity 2. Describe how to perform a caudal epidural injection for the purposes of analgesia during obstetrical manipulations. 3. Perform a speculum examination to evaluate cervix and describe findings.	Vety Medicine	TVCC / Dairy Farm
	13:00-14:00	Lunch		
	14:00-15:30	In a cow, perform the following: 1. Pass a stomach tube to collect rumen fluid 2. Select an appropriate vacutainer for a specified laboratory test and collect a blood sample by coccygeal venipuncture 3. Manually collect urine sample. Describe the sample, perform a dipstick test and interpret the result. Discuss the limitations of the dipstick test.	Vety Medicine	TVCC / Dairy Farm
	15:30-17:00	In a cow, do the following: 1. Percuss and auscultate a cow to determine the presence or absence of each of the following: LDA, rumen gas cap, pneumoperitoneum, pneumocolon, and RDA. Discuss how to differentiate between the above conditions. 2. Select an appropriate catheter for use long-term use in the jugular vein; describe how to place, secure / maintain the catheter. 3. Describe how to restrain and examine a hind foot for suspected foot lameness	Vety Medicine	TVCC / Dairy Farm
Day 14	9:00-10:00	1. Describe how to perform paravertebral anesthesia in a cow. 2. Describe how to perform a cornual nerve block	Surgery & Radiology	TVCC / Dairy Farm
	10:00-13:00	1. Administer oral medication to the cow (with balling gun). 3. Perform a withers pinch test and assess the cow's response. Describe the basis for your assessment. 4. In a cow, describe in detail how and where to inject 30 ml of an antibiotic solution for S/C, IM routes	Vety Medicine	Dairy Farm

	13:00-14:00	Lunch		
	14:00-15:30	In a Goat or Sheep – do the following: Take history, do physical examination, develop diagnostic plan, interpret test results, make differential / most appropriate diagnosis.	Vety Medicine	Instructional Livestock Farm Complex
	15:30-17:00	In a Goat or Sheep : 1. Make a therapeutic and management plan 2. Develop an appropriate prognosis 3.Competently discuss prevention / control issues 4. Competently discuss regulatory issues (eg, notifying state/federal health officials of reportable disease); public health issues (eg, zoonotic potential), withdrawal times etc.	Vety Medicine	Instructional Livestock Farm Complex
Day 15	9:00-13:00	Post-mortem of dog -Thoroughly examination an intact carcass, documenting body condition, Open carcass, examine major cavities, remove viscera, Examination of major organs, Examination of muscles and joints, Examination of endocrine glands and lymph nodes, Remove the animals' head at the atlanto-occipital joint as if to submit for rabies examination. Tissue of heart lung, liver, small intestine, colon, stomach, spleen, pancreas, kidney, skeletal muscle,thyroid, adrenal, internal and external lymph node.	Vety Pathology	PM Hall
	13:00-14:00	Lunch		
	14:00-16:30	Calculation of urine specific gravity and discussion on estimation of kidney concentrating ability.To determine a packed cell volume (PCV) and total protein (TP) of a blood sample and determine the PCV and TP of a pre-spun hematocrit tube.	Physiology and Biochemistry Deptt	
	16:30 onwards	**Evaluation of Training Course**	**Dean, COVSc**	**Committee Room Dean , COVSc**