



# University of Basrah College of Veterinary Medicine Internal and Preventive Medicine Department

# Day One Competences (Log Book)

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#### Introduction

Day One Competencies are the minimum standards and skills required for veterinary medicine undergraduate students to deal medically with the first medical case that is dealt with. This program is concerned with describing the knowledge, skills, and attributes required of post-graduate veterinary students to ensure that they are prepared for their first role in the profession and are safe to practice independently.

This program relies primarily on the practical experience that the student gains during his studies at the **college of veterinary medicine of university of Basrah**.

Upon completion of academic studies, a commitment to continuous professional development becomes imperative within the chosen professional domain. Certain roles may mandate postgraduate training and the acquisition of additional formal qualifications. A recent graduate who has successfully demonstrated Day One competencies is expected to autonomously execute entry-level tasks and fulfill responsibilities within the veterinary profession.

They should exhibit confidence in independently practicing veterinary medicine at a primary care level, demonstrating discernment in seeking guidance from more experienced colleagues when deemed necessary. Anticipated is the need for new undergraduates to allocate additional time for certain procedures, with the provision of accessible support and guidance from senior colleagues.

The Day One Competencies Logbook for students serves as a documented record substantiating the specific knowledge and skills acquired throughout the entire training period. The accurate completion and endorsement by instructors hinge upon the students' demonstrated achievements and performance across various contexts, encompassing theoretical and practical training, assigned duties, summer practical training, as well as both in-class and extramural educational experiences.

The College of Veterinary Medicine of the University of Basrah is responsible for ensuring its students attain Day One Competencies, ensuring their preparedness to assume professional roles upon graduation. In this context, students receive guidance from practicing veterinarians and engage in practical training, which serves as a valuable adjunct in owning their skills through hands-on experience and even acquiring additional competencies.

#### **Objectives of the one-day competencies program**

- 1. Understanding and applying the principles of clinical application and practice of veterinary medicine based on evidence, not an assumption.
- 2. Understanding of the ethical and legal responsibilities of a veterinarian about animals, clients, society, and the environment.
- 3. Demonstrating the ability to deal with incomplete veterinary medical and pathological information.
- 4. Using the practical abilities acquired during the study period to develop and improve animal health and safety.
- 5. Demonstrating the ability to deal with emergencies and adapt to emergency changes during examination, diagnosis, or treatment.
- 6. Learning how to seek advice, assistance, and support from colleagues in the profession.
- 7. Demonstrate the ability to deal safely and professionally with animals and the ability to examine and take samples and models from all animals.
- 8. Obtaining accurate and professional medical information for the animal to build a clear picture of the pathogen in preparation for final diagnosis and treatment.
- 9. Ability to perform a complete clinical examination and demonstrate the ability to make clinical decisions without hesitation.
- 10. Establish appropriate treatment plans and administer treatment to animals within available resources.
- 11. Collection, preservation, and transportation of specimens, then selecting appropriate diagnostic tests and interpreting test results.
- 12. Applying biosecurity principles, including sterilization of equipment and disinfection of clothing.
- 13. Understanding methods of euthanasia and its implementation, with sympathy to the feelings of its owners.
- 14. Conducting food and feed inspection and post-mortem examination of food-producing animals.

#### **Animal management- subject code:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
	Knowledge of the breeds of	Practical			
1.	Iraqi farm animals (cows, camels, sheep, goats, buffalos)	Visual Seminar			
	Knowledge of the parturition	Practical			
2.	period in farm and small	Visual			
animals	-	Seminar			
2	Knowledge of farm animal	Practical			
3.	housing and housing design	Visual			
4.	Knowledge of the methods of	Practical			
4.	farm animals restrain	Visual			
	Knowledge of the methods of	Practical			
5.	equine restrain	Visual			
	equine restrain	Seminar			
	Dentation in horses, cattle,	Practical			
6.	sheep	Visual			
	1	Seminar			
7.	General examination and	Practical			
	behavior of animals	Visual			
		Practical			
8.	Equine Shoeing	Visual			
		Seminar			

#### Poultry management- subject code:

No	Skill, manipulation,	Method of	Course	Date, time	instructor's
110	subject	assessment	(s)	period	supervision
1	General anatomy of	<ul><li>Practical</li></ul>			
1.	poultry	□ Visual			
	Design of noultry	Practical			
2.	Design of poultry houses	□ Visual			
	nouses	Seminar			
	Doultry on vironmental	Practical			
3.	Poultry environmental	□ Visual			
	requirements	☐ Seminar			
4.	Tours within poultry	☐ Practical			
	houses				
_	Classification of	☐ Practical			
5.	poultry vaccines	□ Visual			
	1 7	☐ Seminar			
	Routs of poultry	Practical			
6.	vaccination	□ Visual			
		☐ Seminar			
	Composition of	Practical			
7.	poultry feeding	□ Visual			
	pouldy reeding				

#### Anatomy- subject code:

No	Skill, manipulation, subject		Method of assessment	Course (s)	Date, time period	instructor's supervision
	Classification of bones		Practical			
1.			Visual			
	and joints		Seminar			
			Practical			
2.	Names of joints		Visual			
			Seminar			
			Practical			
3.	Equine skeletal system		Visual			
			Seminar			
			Practical			
4.			Visual			
			Seminar			
			Practical			
5.	Anatomy of hoof		Visual			
			Seminar			
	Muscles of the head and		Practical			
6.	neck of farm animals		Visual			
			Seminar			
_	Muscles of the chest and		Practical			
7.	forelimbs of farm animals		Visual			
			Seminar			
0	Muscles of the abdomen		Practical			
8.	and hind limbs of farm		Visual			
	animals		Seminar			

#### **Chemical safety and security- subject code:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Overview of chemical safety and security	<ul><li>Practical</li><li>Visual</li><li>Seminar</li></ul>			
2.	Potential chemical health problems	<ul><li>Practical</li><li>Visual</li><li>Seminar</li></ul>			
3.	Knowledge of Reactive hazardous substances	<ul><li>Practical</li><li>Visual</li><li>Seminar</li></ul>			
4.	Serious chemical accidents	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Seminar</li></ul>			
5.	Emergency management in the laboratory	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Seminar</li></ul>			
6.	Storage of chemicals	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Seminar</li></ul>			
7.	Chemical waste management and disposal	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Seminar</li></ul>			

#### Biology- subject code:

No	Skill, manipulation , subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Knowledge of parts of light microscope and handling	□ Practical			
2.	Cell structures and composition	<ul><li>Practical</li><li>Visual</li></ul>			
3.	Cell divisions	<ul><li>Practical</li><li>Visual</li><li>Seminar</li></ul>			

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#### **Animal physiology - subject codes:**

	No.	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time	Done under instructor's
				(6)	period	supervision
F	1	Knowledge of main	☐ Practical		pozzoa	
		physiological	□ Visual			
		processes in animals	☐ Comprehension			
F	2	Skills for work with	☐ Practical			
		specialized software for	□ Visual			
		registration, processing and	☐ Comprehension			
		analysis of main physiological				
		parameters like (ECG				
		software)				
				<u> </u>		
	3.	Main concepts and skills in	<ul><li>Practical</li></ul>			
		ECG recording and analysis in	□ Visual			
		healthy animals	☐ Comprehension			
	4.	Determination the physiology	<ul><li>Practical</li></ul>			
		of rumination	□ Visual			
			☐ Comprehension			
	5	Determination the physiology	<ul><li>Practical</li></ul>			
		of gastric secretion	□ Visual			
			☐ Comprehension			
	6	Knowlagent blood sample	<ul><li>Practical</li></ul>			
		collection from animals	□ Visual			
			Comprehension			
	7	Knowlagent physiology of	<ul><li>Practical</li></ul>			
		urination	□ Visual			
			Comprehension			
	8	Knowlagent physiology of	Practical			
		dehydration	□ Visual			
			Comprehension			
	9	Knowlagent physiology of the	<ul><li>Practical</li></ul>			
		liver and pancreas	□ Visual			
			☐ Comprehension			
	10	Knowlagent physiology of	<ul><li>Practical</li></ul>			
		muscle contractions	□ Visual			
			☐ Comprehension			
	11	Knowlagent physiology of	<ul><li>Practical</li></ul>			
		kidneys	□ Visual			
			<ul><li>Comprehension</li></ul>			

Notce:

#### **Biochemistry - subject codes:**

N o	Skill, manipulation, subject	Met	hod of assessment	Course (s)	Date, time Period	Done under instructor's supervision
	Application of theoretical		Practical			•
1	knowledge in understanding		Visual			
	biochemical processes		Comprehension			
	Mastering of existing methods		Practical			
	with application in medicine,		Visual			
2	veterinary		Comprehension			
	medicine, ecology and		-			
	agrarian science					
	Mastering of skills related to:		Practical			
	biochemical analyses of blood		Visual			
	samples, chromatographic		Comprehension			
	techniques,		_			
3	spectrophotometric					
	techniques, modern analytical					
	methods (e.g. HPLC, spectro-					
	scopy, urinalysis etc.)					
	Skills for analysis and		Practical			
4	interpretation of obtained		Visual			
	results		Comprehension			

### **Nutrition - subject codes**

No	Skill, manipulation, subject	Method of assessment	Date, time period	Done under instructor's supervision
	Knowledge of main groups of	<ul><li>Practical</li></ul>		
	animal feeds			
	and fodders	Comprehension		
	Composition of diets for	<ul><li>Practical</li></ul>		
2	various animal species and			
	animal categories	Comprehension		
	Knowledge of the main	☐ Practical		
3	principles of dietetic feeding			
		Comprehension		
4	Knowledge the name of	<ul><li>Practical</li></ul>		
	different animal diet ( green	□ Visual		
	and concentrated diet)	<ul><li>Comprehension</li></ul>		

#### Pharmacology and pharmacy - subject codes:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
9.	Prescription writing with choice of drugs, drug form for a specific disease and calculation of individual patient(s) dose	Practical Visual Comprehension			
10.	Knowledge, skills and competence for responsible and reasonable use of veterinary drugs for treatment of animals and ensuring safety along the food chain and for the Environment	Practical Visual Comprehension			
11.	Access to appropriate sources of data about licensed drugs	Practical Visual Comprehension			
12.	Knowledge of different routes of administration	Practical Visual Comprehension			
13.	Knowledge and reporting supposed adverse effects.	Practical Visual Comprehension			
14.	Knowledge mechanism of action of broadspectrum antibiotics	Practical Visual Comprehension			
15.	Knowledge of the mechanism of action of diuretic	Practical Visual Comprehension			
16.	Knowledge of the mechanism of action of injectable anesthesia and Analgesia	Practical Visual Comprehension			
17.	Knowledge of the different types of fluid Therapy	Practical Visual Comprehension			

#### **Veterinary microbiology - subject codes:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
19.	Acquisition of skills and habits for safe work in the microbiological Laboratory	<ul><li>Practical</li><li>Visual</li><li>Comprehension</li></ul>			
20.	Work with light microscope (dry objective and oil immersion microscopy).	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
21.	Elaboration of microscopic Preparations	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
22.	Staining microscopic preparations	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
23.	Preparation and sterilization of laboratory glassware, nutrient media and biological material	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
24.	Inoculation and reinoculation of bacterial pathogenic samples in liquid and solid nutrient media	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
25.	Isolation of pure cultures	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
26.	Determination of total microbial counts per volume unit	<ul><li>☐ Practical</li><li>☐ Visual</li><li>☐ Comprehension</li></ul>			
27.	Determination of microbial sensitivity to chemotherapeutics (diffusion method and serial dilution method)	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
28.	Acquaintance with agglutination, precipitation reactions, ELISA	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			

#### systemic pathology - subject code:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Skills for performing necropsy and knowledge of necropsy protocols in the main farm animal and poultry species include: ruminants, equines, , dogs, cats, and birds, with diagnostic record	<ul><li>Practical</li><li>Visual</li><li>Comprehension</li></ul>			
2.	Collection and embedding of material for histological examination from different organs and tissues of dead animals for diagnostic purposes	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
3.	Knowledge of the typical pathognomonic postmortem changes in different infectious and non-infectious diseases for diagnostic purposes	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			

#### pathology- subject code:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Knowledge the mechanism of inflammation	<ul><li>Practical</li><li>Visual</li><li>Comprehension</li></ul>			
2.	Knowledge of the mechanism of hematoma	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
3.	Knowledge the mechanism of necrosis and gangrene	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
4.	Monitoring the Pathological cases in the veterinary hospital	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
5.	Practical Steps of Tissue processing for histopathological Observation	☐ Practical only			

#### **Parasitology- subject code:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	methods of parasitic collection, preservation, and diagnosis	☐ Practical only			
2.	Diagnosis and general life cycle of trematode nematode, protozoa, Arthropoda.	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
3.	Direct student collection of fecal samples from animals for lab. Diagnosis	☐ Practical only			
4.	Blood parasite samples	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
5.	Flotation techniques for helminth eggs detection	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
6.	Sedimentation techniques for helminth eggs Detection	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
7.	Flotation techniques for detection of coccidia	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
8.	Staining techniques for detection of cryptosporidia, giardia and amoebae	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
9.	Dehelminthisation drugs	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
10.	Differentiation of ticks from insects	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
11.	Examination for scabies mites: collection of material, processing, observation and interpretation of findings	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
12.	Identification of parasitic Insects	<ul><li>□ Practical</li><li>□ Visual</li></ul>			

#### **Clinic-subject code:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Restraint of different animal species	<ul><li>Practical only</li><li>Visual</li></ul>			
2.	body temperature measurement	☐ Practical only			
3.	History tacking	☐ Practical only			
4.	Palpation of superficial lymph nodes	☐ Practical only			
5.	Pulse Examination	☐ Practical only			
6.	Examination of cardiovascular system	☐ Practical only			
7.	Examination of skin and udder	☐ Practical only			
8.	Inspection of the nasal mucosa	☐ Practical only			
9.	Venous pressure measurement	☐ Practical only			
10.	Examination of digestive system	☐ Practical only			
11.	Respiratory rate examination	☐ Practical only			
12.	Cough provocation	☐ Practical only			
13.	Lung auscultation	☐ Practical only			

#### Theriogenology-subject code:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1	Andrological examination of a male breeder	<ul><li>Practical</li><li>observation</li><li>Comprehension</li></ul>			
2.	Sampling and macroscopic evaluation of semen	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
3.	Microscopic evaluation of semen in native preparation	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
4.	Artificial insemination of large ruminants and small ruminants	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
5.	Vaginal examination in large ruminants	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
6.	Vaginal drug Delivery	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
7.	Vaginal lavage	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
8.	Clinical udder Examination	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
9.	Physical examination of Newborns	☐ Practical only			
10.	Rectal palpation	☐ Practical only			

#### **Surgery-subject code:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Taking clear and accurate surgical disease history from a pet patient	<ul><li>Practical</li><li>Observative</li><li>Comprehension</li></ul>			
2.	Participation in sterilization of various surgical Materials	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
3.	Preparation of the operating field	☐ Practical only			
4.	Preparation of surgical team prior to operation	☐ Practical only			
5.	Suture of the skin by different suture patterns	☐ Practical only			
6.	Wound dressing	☐ Practical only			
7.	Making an immobilization bandage	☐ Practical only			
8.	Determination of patient's anesthetic-risk	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
9.	Sedation of a pet/ farm animal/equid	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
10.	Regional anaesthesia in large ruminants	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
11.	Intubation of a dog or cat	☐ Practical only			
12.	Anaesthesia monito- ring or anaesthetic record Filling	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
13.	Protocol of Euthanasia	<ul><li>□ Practical</li><li>□ Observative</li><li>□ comprehension</li></ul>			

14.	Complete orthopaedic examination of a	Practical Observative		
	Pet			
15.	Radiological Examination	Practical Observative		
16.	Urinary bladder catheterization of a pet	Practical Observative		
17.	Collection of urine from a pet/farm animal for analysis using an appropriate method	Practical Observative		
18.	Recognise when euthanasia is appropriate and perform it humanely and safely	Practical Observative		

## Epidemiology, infectious diseases and preventive medicine -subject code:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Collection of blood samples from large & small ruminants for diagnosis of infectious diseases	<ul><li>Practical only</li><li>Observative</li></ul>			
2.	Primary processing and conservation of blood samples for diagnosis of infectious diseases	☐ Practical only			
3.	Collection, storage, sending and transportation of samples for diagnosis bacteriological, virological and mycological studies from live animals, organ specimens and the environment	☐ Practical only			
4.	Tuberculin test in large ruminants	☐ Practical only			

5.	Development of disinfection programs in livestock premises and animal hospitals. Planning, organization, implementation and reporting disinfection Activities		Practical Observative Comprehension			
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6.	Development of programs for harmful rodents control in livestock premises and animal hospitals. Planning, organisation, implementation and reporting deratisation activities	Practical Observative Comprehension		
7.	Creation of safe conditions for examination and treatment of animals with respect to protection of veterinarians and support staff from Zoonoses	Practical Observative Comprehension		
8.	Proper use and disposal of personal protective equipment	Practical Observative Comprehension		
9.	Acquaintance with and performance of rapid field tests for diagnosis of infectious diseases, col- lection of appropriate samples and interpretation of results	Practical Observative Comprehension		
10.	Recognition of epidemiological features and clinical signs of notifiable and/or zoonotic infectious	Practical Observative Comprehension		

#### **Internal medicine- subject codes:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
14.	Preparation of a blood smear	☐ Practical only			
15.	Mouth opening	☐ Practical only			
16.	Stomach tube placement	☐ Practical only			
17.	Stomach/rumen lavage	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
18.	Rumen palpation/ auscutation	☐ Practical only			
19.	Rumenocentesis	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
20.	Placement of temporary and permanent rumen magnet cage	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
21.	Tests for foreign body detection in cow	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
22.	Liver percussion	<ul><li>☐ Practical</li><li>☐ Observative</li><li>☐ Comprehension</li></ul>			
23.	Urinary bladder lavage	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
24.	Cystocentesis	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
25.	Urine conservation and preparation for laboratory analysis	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
26.	Intraruminal drug delivery	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			

#### Poultry disease- subject codes:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
1.	Anti-mortem inspection	☐ Practical only			
2.	Euthanasia	☐ Practical only			
3.	Post-mortem autopsy	☐ Practical only			
4.	Rout of therapy administration	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
5.	Sampling	☐ Practical only			
6.	Preservation of samples	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
7.	HA test	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
8.	HI test	<ul><li>□ Practical</li><li>□ Observative</li></ul>			
9.	Chicken embryo inoculation	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
10.	Antibiotic sensitivity test	<ul><li>☐ Practical</li><li>☐ Observative</li><li>☐ Comprehension</li></ul>			
11.	ELISA test	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
12.	PCR test	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			
13.	Phylogenic tree analysis	<ul><li>□ Practical</li><li>□ Observative</li><li>□ Comprehension</li></ul>			

#### **Internal medicine- subject codes:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
11	Indirect determination of somatic cell counts using a rapid mastitis test	☐ Practical only			
2.	Collection of sterile milk samples for microbiological examination	☐ Practical only			
3.	Processing of a preparation for cytological diagnosis	☐ Practical only			
4.	Application of eye drops and ointments	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
5.	Complete dental examination of a pet	☐ Practical only			
6.	Cleansing of the external ear canal and local drug application	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
7.	Otoscopy	<ul><li>☐ Practical</li><li>☐ Visual</li></ul>			

### **Surgery-subject code**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
19.	Knowledge of Suture materials and suturing	☐ Practical only			
20.	Knowledge of different Suture Patterns	☐ Practical only			
21.	Knowledge control of bleeding	<ul><li>Practical</li><li>Visual</li></ul>			
22.	Electrocautery technique	<ul><li>Practical</li><li>Visual</li></ul>			
23.	Wound debridement and management	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
24.	Puncture or incision of abscess/cyst/hematoma	☐ Practical only			
25.	Tooth extraction	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
26.	Participation in castration surgery	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
27.	Decornuation	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
28.	Surgical approach for GIT organs	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			

#### **Theriogenology-subject code:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
31.	Rectal examination and detection of uterine and ovarian parameters in large Ruminants	<ul><li>Practical</li><li>Visual</li><li>Comprehension</li></ul>			
32.	Obstetric examination	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
33.	Fetal viability determination	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
34.	Obstetrics help through extraction	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
35.	Fetotomy instruments	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
36.	Caesarean section	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
37.	Foetotomy procedure	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
38.	Obstetric help through drug/ hormone Administration	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
39.	Repositioning of caudal dislocation of genital organs	☐ Practical only			

#### Meat hygiene-subject code:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
14.	Use One Health principles in veterinary practice, promoting the health and safety of people and sustainability of the environment.	☐ Practical only			
15	evelop, evaluate, recommend, and practise protocols for biosecurity, biosafety and infection prevention and control (IPC)	☐ Practical only			
16	Perform antemortem and postmortem inspection of animals and make	☐ Practical only			

17.	Apply veterinary elements of food safety standards and practices throughout the production chain, including on the farm and during food processing.	Practical Visual		
18.		Practical only		

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#### Fish disease-subject code:

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
19.	Anatomy of fish	☐ Practical only			
20.	Blood sample collection	☐ Practical only			
21.	Blood circulation of fish	☐ Practical only			
22.	Parasitic manifestations of fish	<ul><li>☐ Practical</li><li>☐ Visual</li></ul>			

#### **Internal medicine- subject codes:**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
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2.	Detection of helminthic larvae in the skin	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
3.	Detection of helminthic larvae in fecal samples	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
4.	Detection of helminthic larvae in blood samples	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
5.	Preparation and staining of blood smears according to Giemsa stain	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
6.	Diagnostics of stationary ectoparasites	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
7.	Specific techniques for drug administration in animals	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
8.	Measurement of rectal the temperature of domestic animals	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			

### **Surgery-subject code**

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
29.	Surgical approaches for urinary tract	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
30.	Rumenatomy procedure	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
31.	Cesarean section	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
32.	Surgical detection of TRP	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
33.	Plane and contrast radiography	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
34.	Surgical enucleation of the eye	<ul><li>□ Practical</li><li>□ Visual</li><li>□ comprehension</li></ul>			
35.	Surgical approaches and treatment of abomasal displacement	<ul><li>☐ Practical</li><li>☐ Visual</li><li>☐ Comprehension</li></ul>			
36.	Mechanisms of General anesthetic technique	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
37.	Inhalation anesthesia	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
38.	Animal premedication prior to surgery	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
39.	Surgical affections of udder and teat	<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			
40.		<ul><li>□ Practical</li><li>□ Visual</li><li>□ Comprehension</li></ul>			

#### **Theriogenology-subject code:**

1. <b>No</b>	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
2.	Repositioning of caudal dislocation of genital organs	☐ Practical only			
3.	Anatomy of male and female genital system in ruminants	☐ Practical only			
4.	Anatomy of male and female genital system in small animals	☐ Practical only			
5.	Hormone regulation of the estrus cycle in ruminants	☐ Practical only			
6.	Hormone regulation of estrus cycle in small animals	☐ Practical only			
7.	Clinical cusses of repeat estrus in cow	☐ Practical only			
8.	Artificial insemination method in cow	☐ Practical only			
9.	Preparation of semen sample	☐ Practical only			

#### Milk hygiene-subject code

No	Skill, manipulation, subject	Method of assessment	Course (s)	Date, time period	instructor's supervision
23.	Factors related to milk spoilage	☐ Practical only			
24.	milk quality control	☐ Practical only			
25.	The constituents of milk	☐ Practical only			
26.	How to ensure good quality milk	<ul><li>□ Practical</li><li>□ Visual</li></ul>			
27.	Advice to give to farmers	☐ Practical only			
28.	Sources of milk contamination at the farm	☐ Practical only			
29.	Advice to give to farmers on avoiding contamination	☐ Practical only			
30.	Hygienic milk handling	☐ Practical only			
31.	Practical exercises in the field	☐ Practical only			

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