

Course Unit	Samples Collection and Dispatch to Laboratory		Field of study	Veterinary Technology	
Bachelor in	Veterinary Nursing		School	School of Agriculture	
Academic Year	2019/2020	Year of study	2	Level	1-2
Type	Semestral	Semester	1	Code	9085-408-2101-00-19
Workload (hours)	162	Contact hours	T 30	TP -	PL 30
			TC -	S -	E -
			OT 20	O -	

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Hélder Miranda Pires Quintas

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Learn the fundamentals of anamnesis and physical examination of small animals, large animals and exotic species to help the veterinary surgeon in clinics activities.
2. Gain knowledge of how to identify different symptoms of animal illness
3. Be able to collecting and handling biological (blood, milk, urine, faeces, ruminal fluid, semen), pathological and non- biological (water, feed) samples.
4. Be familiar with biopsy and necropsy techniques.
5. Be familiar with animal handling and physical restraint.
6. Be aware of professional risks (related to zoonosis) and how to prevent then.
7. Be able to handle and differentiate hospital residues.

### Prerequisites

Before the course unit the learner is expected to be able to:

1. The students should have previous knowledge of anatomy, biochemistry, behavior and animal welfare.
2. Previous knowledge of physiology, histology and anatomo – pathology.

### Course contents

I – Anamnesis and physical examination in small animals, large animals and exotic species: II – Collection of material for laboratory examination: III – Biopsy and necropsy techniques IV- Hospital residues. V- Zoonosis and professional risks.

### Course contents (extended version)

1. Anamnesis and physical examination in small animals, large animals and exotic species.
2. Methods and instruments.
3. The history and medical records. General impression and examination.
4. Examination of digestive tract.
5. Examination of respiratory and cardiovascular systems.
6. Examination of urinary tract, reproductive tract and mammary glands.
7. Examination of skin and ears.
8. Examination of eyes, nervous and locomotor systems.
9. Collection of material for laboratory examination: biological and pathological samples.
10. Biopsy and necropsy techniques.
11. Hospital residues: Handling and management.
12. Zoonosis and professional risks.

### Recommended reading

1. Aspirall, V. , 2014. Clinical Procedures in Veterinary Nursing. 3ª edição, Butterworth Heinemann, Elsevier Health Sciences, Massachusetts, EUA, 384 pp.
2. Boyle, J. , 2016. Crow & Walshaw's Manual of Clinical Procedures in Dogs, Cats, Rabbits & Rodents. 4ª edição, John Wiley & Sons Inc, NY, EUA, 424 p.
3. Feitosa, F. , 2014. Semiologia Veterinária – A Arte do Diagnóstico. 3a edição, Editora Roca, São Paulo, Brasil, 644 pp.
4. Rockett, J. , Bosted, S. , 2015. Veterinary Clinical Procedures in Large Animal Practices. 2ª edição, Cengage Learning, Boston, EUA, 672 pp.
5. Taylor, S. , 2015. Small Animal Clinical Techniques. 2ª edição, Saunders Elsevier, Filadélfia, EUA, 288 pp.

### Teaching and learning methods

Lectures will be support by media and multimedia resources. Practical classes will engage direct working with animals. Everyone is expected to contribute actively to discussions. Non present hours will involve training in a working environment. Graduate students are expected to work largely on their own initiative although with the close support and supervision of a tutor.

### Assessment methods

1. Test (25%)+Restrict Exam(25%)+ Practical Exam(50%) - (Regular, Student Worker) (Final)
2. Theoretical part (50%) + Practical part (50%) - (Student Worker) (Final)
3. Theoretical part (50%) + Practical part (50%) - (Regular, Student Worker) (Supplementary, Special)

### Language of instruction

Portuguese

### Electronic validation

Hélder Miranda Pires Quintas	Álvaro Luís Pegado Lemos Mendonça	Hélder Miranda Pires Quintas	Alfredo Jorge Costa Teixeira
06-11-2019	09-11-2019	10-11-2019	11-11-2019