INSTITUTO POLITÉCNICO DE BRAGANÇA

Course Unit	Animal Hygiene and Health			Field of study	Veterinary Sciences								
Bachelor in	Zootechnical Engineering			School	School of Agriculture								
Academic Year	2022/2023	Year of study	2	Level	1-2	ECTS credits	6.0						
Type	Semestral	Semester	2	Code	9129-312-2105-00-22								
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): Marieta Amélia Martins Carvalho

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Major animal diseases, their causes and importance in the exploration and public health. Zoonoses. Basic concepts of epidemiology and prevention of infectious diseases and parasitic diseases.
2. Develop and implement knowledge management programs hygiene and health at different stages of production.

Prerequisites

Before the course unit the learner is expected to be able to:
The students will have to know: Chemistry, Biochemistry and Microbiology.

Course contents

Theoretical: basic concepts in pathology. Study of the emergent infectious, contagious and parasitic diseases. Etiology, pathogeny, epidemiology, medical and sanitary preventive medicine. Public health public human vet / health - zoonosis. Practice: hygiene and management of explorations, domesticated and wild animals. Laboratory techniques of diagnosis. Collect and sending of material to the laboratory.

Course contents (extended version)

1. main objectives of veterinary medicine: concepts of health / disease.
2. methods of study of infectious contagious
   - Etiology
   - Epidemiological data
   - pathogenesis
3. prophylaxis of infectious diseases
4. Public health and veterinary
5. Epidemiological attitudes
6. Defense mechanisms of the animal
7. Active and passive immunity
8. Infectious diseases in cattle
   - Bacterial diseases - brucellosis, tuberculosis, contagious, leptospirosis, anthrax
   - Bacterioses - contagious agalactia, paratuberculosis, enterotoxemia
   - Virus Diseases - Bluetongue, FMD, IBR-IPV, ecthyma
9. Infectious diseases of pigs
   - Evil red, swine fever, Aujesky diseases, other viruses pork
10. Infectious diseases of poultry
    - Avian influenza, Newcastle disease, avian mycoplasmosis, chlamydiosis, salmonellosis
11. Infectious diseases of rabbits
    - Myxomatosis, tularaemia, pasteurellosis, haemorrhagic viral disease
12. Parasitic diseases of pigs
    - Digestive parasitosis: cysticercosis, visceral nematodose
    - Respiratory parasites: metastrongilose.
    - Systemic parasitic infections: toxoplasmosis, hydatidosis
    - Cutaneous parasitosis: sarcoptose, hematopinose.
13. Biological vectors

Recommended reading

1. MARTINS, J. P. ; BARRETO, L. F. G. , 2011. Manual de Zoonoses. Vol. II. 1ª Edição. CRMV-RS, CRMV-SC, CRMV-PR. Brasil, 136 pp.
2. HIEPE, T. , LUCIUS, R. y GOTTSTEIN, B. , 2011. Parasitología general con principios de inmunología, diagnóstico y lucha antiparasitária. I Edition. Editorial Acribia, S. A.
3. MEHLHORN, H. , 2016. Animal Parasites: Diagnosis, Treatment, Prevention. Springer International Publishing Switzerland.
4. PFEIFFER, D. , 2010. Veterinary Epidemiology: An Introduction. Willey-Blackwell.
5. CARVALHO, M. A. M. , 2023. Aulas de Higiene e Sanidade Animal. Engª Zootecnica. IPB. Escola Superior Agrária. Bragança.

Teaching and learning methods

Theoretical magisterial classrooms with resource to audiovisual equipments, multimedia and informatics Practical classrooms, essentially tutorial and at field, with the animals in the explorations. Husbandery sanitary and preventive of the cattle intensive and biological explorations. Collect of material in living animals and death animals. Principal laboratory techniques

Assessment methods

1. Continuous assessment: - (Regular) (Final)
   - Development Topics - 25% (Monograph and its presentation in class (25%; 1, 5 ECTS). The note must be >9, 5 points.)
   - Practical Work - 25% (Practical work (25%; 1, 5 ECTS). The note must be >9, 5 points.)
   - Intermediate Written Test - 25% (Intermediate Written Test theory / practical (25%; 1, 5 ECTS). The note must be >9, 5 points.)
   - Final Written Exam - 25% (A written theory / practical (25%; 1, 5 ECTS). The note must be >9, 5 points.)
2. Evaluation of working students: - (Student Worker) (Final, Supplementary, Special)
   - Final Written Exam - 100% (Global written exam: theoretically and practical (100%; 6, 0 ECTS).)
3. Resource evaluation: - (Regular, Student Worker) (Final, Supplementary, Special)
   - Final Written Exam - 100% (Global written exam: theoretically and practical (100%; 6, 0 ECTS).)
4. Special evaluation: - (Regular, Student Worker) (Final, Supplementary, Special)

Assessment methods

- Final Written Exam - 100% (Global written exam: theoretically and practical (100%; 6, 0 ECTS).)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

Marieta Amélia Martins Carvalho	Teresa Maria Montenegro Araújo A. Correia	Marieta Amélia Martins Carvalho	Ramiro Corujeira Valentim
28-02-2023	01-03-2023	01-03-2023	01-03-2023