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|------------------|--------------------------|---------------|----------------|-----------------------|-----|
| Course Unit      | Veterinary Public Health |               | Field of study | Veterinary Science    |     |
| Bachelor in      | Veterinary Nursing       |               | School         | School of Agriculture |     |
| Academic Year    | 2023/2024                | Year of study | 2              | Level                 | 1-2 |
| Type             | Semestral                | Semester      | 2              | ECTS credits          | 6.0 |
| Code             | 9085-783-2203-00-23      |               |                |                       |     |
| Workload (hours) | 162                      | Contact hours | T              | -                     | TP  |
|                  |                          |               | PL             | -                     | TC  |
|                  |                          |               | S              | -                     | E   |
|                  |                          |               | OT             | -                     | 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) Álvaro Luís Pegado Lemos Mendonça

### Learning outcomes and competences

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

1. Know the major zoonoses, the route of spread and prevention techniques. Knowing the disease in populations, and to epidemiological surveys and the prediction of occurrence. Prevalence rate
2. They should know the main food of animal origin and its importance in food toxicoinfections and the concepts of HACCP
3. Health inspection of products of animal origin. Know the legal basis of health inspection. Know the major risks in food safety. European and National legislation

### Prerequisites

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

1. Basic concepts of biology, microbiology, organic chemistry and biochemistry.
2. Basic concepts of animal diseases
3. Basic concepts of informatics

### Course contents

Concepts of disease and epidemiology. General Epidemiology, Determinism of the disease. Description of their occurrence. Determinants of disease. Transmission and maintenance of the disease. Vertical transmission. Maintenance of infection. Ecology of the disease. Patterns of disease. Nature and source of data. ZOONOSSES IN PETS, IN LIVESTOCK PRODUCTION, AND IN WILD ANIMALS AND EXOTIC. ANIMAL FOOD PRODUCTS. CONCEPTS OF HYGIENE APPLIED TO BUSINESS UNITS. HACCP

### Course contents (extended version)

1. Concept of Disease
2. Basic Concepts of epidemiology. Concepts and Objectives
  - Epidemiological research - descriptive, analytical, experimental, theoretical
  - General epidemiology - Components: data collection, qualitative and quantitative research
3. Determinism of the disease: Koch's postulates and Evans. Concept of variable.
  - Explanatory variables and response
  - Associations of variables
4. Description of the occurrence of disease: Structure of the actual Measurement of occurrences.
  - Prevalence, incidence, ratios, proportions, rates
  - Graphical presentation of data
5. Determinants of disease: host, agent, environmental interactions.
6. Transmission and maintenance of the disease: horizontal and vertical transmission.
7. Disease ecology
8. Patterns of disease
9. Nature and origin of data
10. Zoonoses in pets
  - Rabies, leishmaniasis, dermatophytosis, equinocosis, hydatidosis, toxoplasmosis, leptospirosis.
  - Hookworm, cat scratch disease.
11. ZOONOSSES IN ANIMAL PRODUCTION
  - Bovine spongiform encephalopathy, tuberculosis, brucellosis, foot and mouth disease, chlamydiosis.
  - Parasitic infections: cestodes, nematodes and trematodes
12. ZOONOSSES IN WILD ANIMALS AND EXOTIC
  - Psittacosis, tularemia, salmonellosis
13. FOOD ANIMAL: Composition
  - Methods of food preservation - physical, chemical and microbiological contaminants:
14. Hygiene in processing plants and retail, hotel and restaurant. Design and legislation
15. HACCP (Hazard Analysis and Critical Control Point)
16. Health inspection of meat and derivatives. Legal basis of acts of health inspection. Legislation

### Recommended reading

1. Collins, D. , Huey, R. , 2015. Gracey's Meat Hygiene. 11ª edição, Wiley-Blackwell, NJ, EUA, 352 pp.
2. Rashid, M. , Agarwal, R. , 2013. Meat Hygiene & Food Safety. Narendra Publishing House, Nova Deli, Índia, 178 pp.
3. Sergeant, E. , Perkins, N. , 2015. Epidemiology for Field Veterinarians: An Introduction. CABI, Oxford, RU, 320 pp.
4. Thrusfield, M. , 2007. Veterinary Epidemiology. Wiley-Blackwell, NJ, EUA, 624 pp.
5. Vellarino, J. 2011. Inspección Ante Mortem y Post Mortem en Animales de Producción. Servet, Saragoça, Espanha, 304 pp.

### Teaching and learning methods

Lectures will be supported by media and multimedia resources. Practical classes will engage direct working in lab. Seminars will allow teacher and students to explore particular topics. 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. Continuous assessment - (Regular) (Final)
  - Intermediate Written Test - 50% (two theoretical tests (25%+25%). minimum score 7, 5)
  - Laboratory Work - 50% (Reports from practical lectures. Minimum score 7, 5)
2. Final evaluation - (Regular) (Supplementary, Special)
  - Laboratory Work - 50% (Reports from practical lectures. Minimum score 7, 5)

Assessment methods

- Final Written Exam - 50% (Two written theoretical tests. Minimum score 7. 5)

3. worker students - (Student Worker) (Final, Supplementary, Special)

- Practical Work - 50% (One practical test. Minimum score 7. 5)
- Final Written Exam - 50% (Two written theoretical tests. Minimum score 7. 5)

Language of instruction

Portuguese

| Electronic validation             |                         |                              |                           |
|-----------------------------------|-------------------------|------------------------------|---------------------------|
| Álvaro Luís Pegado Lemos Mendonça | Duarte Manuel Diz Lopes | Hélder Miranda Pires Quintas | Ramiro Corujeira Valentim |
| 13-02-2024                        | 14-02-2024              | 15-02-2024                   | 17-02-2024                |