Course Unit Descriptor

Study Programme: Veterinary Medicine

Course Unit Title: Quality Assurance in Farm Production

Course Unit Code: 3IVM11I108

Name of Lecturer(s): Associate Professor Miodrag Radinović, Assistant Professor Marija Pajić

Type and Level of Studies: Undergraduate Academic Studies

Course Status (compulsory/elective): Elective (Module 1 - Food safety)

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 2

Prerequisites: None

Course Aims:

The subject enables student to acquire: knowledge and understanding of the basic principles of biosecurity in farm production; skills important for the implementation of biosecurity measures, for biorisk menagement on farms and quality assurance in farm production.

Learning Outcomes:

After completion of the course from this subject, student should be able to: understand and explain the basic principles of maintaining biosecurity on pig, cattle, sheep and goat farms, biorisk factors and their impact on productivity and on the occurrence of diseases in farm animals, pathways of disease entry, spreading and progress in herds of farm animals, the impact of housing conditions and the environment to the level of biorisk, the most important technopathies and diseases related to breeding of farm animals; define critical control points on the farms; evaluate the efficacy of hygienic-sanitary measures; implement the basic control measures of biosecurity and biorisk menagement relating to animal feed, water and manure; organize and carry out the necessary biosecurity measures on the pig, cattle, sheep and goat farms; point to the existence of specific problems and failures in biosecurity on farms, and to participate in resolving and overcoming them, all in order to ensure the quality "from farm to fork".

Syllabus:

Theory

Aspects of food safety in different systems of animal housing and breeding. The impact of housing, feeding, genetic s election and management in relation to the problems of the musculoskeletal system, udder problems, metabolic and reproductive problems, behavior, fear and pain. The overall impact of farming systems on animal welfare and disease outbreaks. Factors that are considered useful in terms of dairy cows welfare and are preferable in terms of food safety. Good farm / hygienic practices (GFP/GHP) and ensuring animal welfare. Effective management of animal health including the responsible use of antimicrobials. Hygienic breeding including the appropriate farm design and effective biosecurity. Microbiological quality of animal feed (forage and concentrate) and water. Prevention of stress in animals. Hygienic milking. Hygienic preparation of animals for slaughter. Management of animal waste disposal. Factors that are considered useful in terms of animal welfare, and are undesirable in terms of food safety.

Practice

Clinical practice on farms, and keeping the diary of practical work.

Required Reading:

1. Boboš, S., Vidić Branka: Mlečna žlezda preživara - morfologija, patologija, terapija. Monografija, Poljoprivredni fakulte Novi Sad, 2005.
2. Bačić, G.: Dajagnostika i liječenje mastitisa u goveda. Veterinarski fakultet, Zagreb, 2009.
3. Stojanović, L., Katić Vera: Higijena mleka. Veterinarska komora Beograd, 2004. 2011.
4. Frans J.M. Smulders and John D. Collins (Eds.) Food safety assurance in the pre-harvest phase, Wageningen Academic Publishers, The Netherlands, 2002.

Weekly Contact Hours: 30	**Lectures:** 15	**Practical work:** 15

Teaching Methods:

Lectures with application of audio-visual aids;

Practical work on pig, cattle, sheep and goat farms, which includes health surveillance, implementation of diagnostic and preventive interventions and keeping the diary of practical work.

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	**Final exam**	points
Active class participation	20	practical exam	40
Test		oral exam	20
Preliminary exam(s)		…….	
Diary of practical work	20		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.