## Course Unit Descriptor

**Study Programme: VETERINARY MEDICINE** 

Course Unit Title: Food Safety Risk Assessment

Course Unit Code: 19DVE4I057

Name of Lecturer(s): Associate Professor Bojan Blagojević and Associate Professor Marija Pajić

Type and Level of Studies: Doctoral Academic Studies

Course Status (compulsory/elective): Elective

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: 8** 

Prerequisites: Scientific research methods, Biostatistics, Courses of elective blocks 1, 2, 3

# **Course Aims:**

The aim of this course is to provide students with an understanding of the source, transmission and behavior of the main biological hazards along the food chain and in the context of food safety, with emphasis on the epidemiology of these hazards in the food chain, and the principles of risk assessment of the hazards, particularly from the veterinary public health viewpoint.

# **Learning Outcomes:**

Upon successful completion of the course, students will be able to understand and apply the principles of qualitative and quantitative food safety risk assessment.

#### **Syllabus:**

Theory

The principles and the role of risk assessment in the process of risk analysis; Qualitative and quantitative risk assessment; Deterministic and stochastic models for the quantitative risk assessment; Hazard identification; Hazard characterization (including dose-response relationship); Exposure assessment; Risk characterization; Uncertainty and variability; Sensitivity analysis.

### Research

Analysis of existing risk assessment models for selected combinations of human foodborne pathogens and food commodities; Creating own risk assessment models for selected combinations of human foodborne pathogens and food commodities.

### **Required Reading:**

- 1. Forsythe S. J. (2002). The microbiological risk assessment of food. Blackwell Science Ltd., Oxford, UK
- 2. Brown M., Stringer M. (2002) Microbiological risk assessment in food processing. Woodhead Publishing Ltd., Cambridge, UK
- 3. EFSA, FAO, WHO food safety risk assessments

Weekly Contact Hours: Lectures: 4 Research: 4

## **Teaching Methods:**

Lectures in the classroom with the use of audio-visual aids; Independent research work and development of risk assessment models.

## **Knowledge Assessment (maximum of 100 points):**

Pre-exam obligations	points	Final exam	points
Seminar	25-50	oral exam	25-50