Course Unit Descriptor

Study Programme: Veterinary Medicine

Course Unit Title: Laboratory diagnosctics of companion animal diseases

Course Unit Code: 3IVM11070

Name of Lecturer(s): Aleksandar S. Potkonjak

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): compulsory

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:** Microbiology, Immunology, General and Special Pathological Morphology, General and Special Pathophysiology, Veterinary Epidemiology, Diseases of dogs and cats I and II

## **Course Aims:**

The course enables student to acquire: 1. knowledge of the principles underlying the methods of laboratory diagnostics, as well as their advantages and limitations, 2. skills for implementation of methods of laboratory diagnostics, and 3. the ability to interpret the results

## **Learning Outcomes:**

Upon completion of the course from this subject, student should be able to: 1. describe the principles underlying the methods of laboratory diagnostics, 2. explain the advantages and limitations of the methods of laboratory diagnostics, 3. choose methods of laboratory diagnostics corresponding to a clinical case, 4. implement the methods of laboratory diagnostics, 5. analyze and correctly interpret the results of laboratory diagnostics, and 6. compile a report and opinion about the laboratory diagnostics

## **Syllabus:**

Theory

Levels of bio security and safety work in the laboratory. Sampling, transport, reciving, processing of biological material, and issuing results of laboratory findings. Analyzing and Interpretation of the laboratory findings. Direct laboratory techniques for identification of causative agents of disease. Indirect laboratory techniques for identification of causative agents. Molecular techniques for diagnostic of infective agents

## Practice

Receiving and processing of biological material. Performing and utilizing different methods of laboratory diagnostic. Analysis and interpretation of results of laboratory diagnostic. Preparation of reports and scientific opinions base on performed laboratory diagnostic.

Required Reading: Greene C. Infectious Diseases of the Dog and Cat. Fourth edition, Saunders, 2011. Jacobson E. Infectious Diseases and Pathology of Reptiles: Color Atlas and Text. First edition, CRC Press 2007. Inzana T.J. Cumitech 28: Laboratory Diagnosis of Zoonotic Infections: chlamydial, fungal, viral, and parasitic infections obtained from companion and laboratory animals. ASM Press, 1996. Hartmann K., Levy J. K. Self-Assessment Colour Review of Feline Infectious Diseases. Thieme Medical Pub, 2011.

Weekly Contact Hours: Lectures: 1 Practical work: 1

Teaching Methods: Lectures, Practical classes, Consultations, research work

Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class	15	written exam	50
participation	13	written exam	
Practical work	15	oral exam	20
Preliminary exam(s)	0		
Seminar(s)	0		

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