

<b>Study Programme:</b> Veterinary Medicine		
<b>Course Unit Title:</b> Principles of Epidemiology		
<b>Course Unit Code:</b> 3DVM1117		
<b>Name of Lecturer(s):</b> Aleksandar S. Potkonjak		
<b>Type and Level of Studies:</b> Doctoral academic studies		
<b>Course Status (compulsory/elective):</b> elective		
<b>Semester (winter/summer):</b> winter		
<b>Language of instruction:</b> English		
<b>Mode of course unit delivery (face-to-face/distance learning):</b> face-to-face		
<b>Number of ECTS Allocated:</b> 6		
<b>Prerequisites:</b> no		
<p><b>Course Aims:</b></p> <p>Course introduces the concepts of epidemiology and biostatistics as applied to veterinary medicine and public health problems. Emphasis is placed on the principles and methods of epidemiologic investigation, appropriate summaries and displays of data, and the use of classical statistical approaches to describe the health of populations. Topics include the dynamic behavior of disease; usage of rates, ratios and proportions; methods of direct and indirect adjustment. Various epidemiologic study designs for investigating associations between risk factors and disease outcomes are also introduced, culminating with criteria for causal inferences.</p>		
<p><b>Learning Outcomes:</b></p> <p>After completion of this course, students will be able to apply principles of epidemiology and biostatistics to the prevention of disease and the improvement of health. Also, students will be able to: distinguish the roles and relationships between epidemiology and biostatistics in the prevention of disease and the improvement of health; overcome compute basic descriptive statistics and use data from analytic methods; demonstrate a understanding of epidemiologic methods and study design; as combine appropriate epidemiological concepts and statistical methods.</p>		
<p><b>Syllabus:</b></p> <p><i>Roles of quantitative methods. Quantifying and comparing measures. Quantifying the natural history of disease. Probability concepts and their use in evaluation of diagnostic tests. Epidemiologic study designs. Estimating risk and interpretation of data from epidemiologic studies. Applying epidemiology to evaluation public health policy.</i></p>		
<p><b>Required Reading:</b> Rothman K.J. et al. Modern Epidemiology. Thrid edition, Lippincott Williams &amp; Wilkins, 2008.; Krämer A. Modern Infectious Disease Epidemiology: Concepts, Methods, Mathematical Models, and Public Health. 2010 edition, Springer, 2010.; Salman M. Animal Disease Surveillance and Survey Systems: Methods and Applications. First edition, Wiley-Blackwell, 2003.; Cameron A. Data Management for Animal Health, In: AusVet Series in Epidemiological Skills for Animal Health. AusVet Animal Health Services Brisbane, Vol 1., Australia, 2004.Sergeant E. et al. Epidemiological Problem Solving, In: AusVet Series in Epidemiological Skills for Animal Health. AusVet Animal Health Services Brisbane, Vol 2., Australia, 2004.</p>		
<b>Weekly Contact Hours:</b>	<b>Lectures: 3</b>	<b>Practical work: 3</b>
<p><b>Teaching Methods:</b> Direct instruction (Lecture, compare and contrast), Indirect instruction (Problem solving, Case studies), Experimental learning (Conducting experiments, Focused imaging, Field observations, Surveys), Instructional skills (Explaining, demonstrating).</p>		

<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation	0	written exam	50
Practical work	0	oral exam	0
Preliminary exam(s)	0	Project presentation	50
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.			