

Title	ANIMALS OF PUBLIC HEALTH IMPORTANCE						
Code	ZDIB21						
Study Program	Postgraduate Interdisciplinary University Study Programme Environment Protection and Nature Conservation						
Semester	III.						
ECTS	5						
Status	Elective						
Lecturer	Assistant Professor Mirta Sudarić Bogojević, PhD						
Co-Lecturers	-						
Requirements for Enrolment	-						
Objectives	The aim of the course is to give students the basic knowledge of biology and ecology of harmful animals that have a significant negative impact on environment and human health. Also, to familiarize students with the pest control methods, and pest control legislation. The goal is to encourage students to solve problems and generate new ideas.						
Learning Outcomes	<p>After completing the subject, students will be able to:</p> <ol style="list-style-type: none"> 1. Describe the basic biological characteristics of the animals of public health importance. 2. Identify and describe animals (insects and rodents) that are harmful to human health. 3. List the infectious diseases transmitted by harmful animals. 4. Describe the methods for pest control, pesticide application techniques and the specifics of the implementation in the field. 5. Suggest DDD measures in a particular case. 6. Explain the ways of entry, spread and control the invasive alien species. 7. Apply the acquired knowledge in theory and practice. 						
Connection between Learning Outcomes, Curricular and Student Activities	Student Activities	ECTS	Learning Outcomes	Curricular Activities	Methods of Assessment	Credits*	
						min	max
	Class attendance Active participation	1	1-7	Lectures	Evidence of class attendance and evaluation	5	10
	Class attendance Active participation	1,5	4-7	Practical work	Evidence of class attendance and evaluation	20	30
	Preparation for the written exam	1	1-7	Knowledge test	Written exam	25	40
	Preparation for the oral exam	1,5	1-7	Final exam	Oral exam	10	20
Sum	5					60	100
Consultations							
Learning Activities	Lectures		Seminars		Practice		
Hours	10		-		5		
Contents / Teaching Units	Biology and ecology of animals of public health importance (with a focus on insects and rodents). The economic and public health importance of harmful animals. Infectious diseases transmitted by insect pest and harmful rodents. DDD measures (disinfection, fumigation and pest control). Insecticide and rodenticide application methods. Side effects of pest control on the environment and human health. The current legislation and pest control in Croatia. Invasive alien animal species in Croatia and Europe.						

	Organized visit to a company authorized to carry out DDD measures.
Obligatory Literature	<ol style="list-style-type: none"> 1. Asaj A. 1999. Deratizacija u praksi, Medicinska naklada, Zagreb. 2. Asaj A. 2000. Zdravstvena dezinfekcija u nastambama i okolišu, Medicinska naklada, Zagreb. 3. Krajcar D. 2001. Dezinfekcija, dezinfekcija, deratizacija. Medicinska naklada i Visoka zdravstvena škola, Zagreb.
Recommended literature	<ol style="list-style-type: none"> 1. Atkinson P.W. 2010. Vector Biology, Ecology and Control. Springer. 2. Goddard J. 2007. Physician's guide to Arthropods of Medical Importance. 5th ed. CRC Press, Taylor and Francis Group. 3. Gratz N.G. 2006. The vector- and rodent-borne diseases of Europe and North America: their distribution and public health burden. Cambridge University Press. 4. Mallis A. 2011. Handbook of Pest Control - the Behavior, Life History and Control of Household Pests. 10th ed., Franzak and Foster Co. Cleveland, Ohio. 5. Marquardt W.H. 2004. Biology of Disease Vectors. 2nd ed. Academic Press. 6. Service M. 2012. Medical Entomology for Students. 5th ed. Cambridge University Press. 7. Takken W., Knols B.G.J. 2007. Emerging pests and vector-borne diseases in Europe. Wageningen Academic Publishers. 8. Maceljiski M. 2001. Poljoprivrena entomologija, Zrinski, Čakovec.
Requirements for Aquiring Signature	Lecture and practical class attendance.
Type of Exam	Written and oral examination.
Lectures Language	Croatian.
Quality Monitoring	Student course evaluation questionnaire.