

Study Programme: PHYTOMEDICINE			
Course Unit Title: AGRICULTURAL ZOOLOGY WITH ECOLOGY			
Course Unit Code: 19.FTM008			
Name of Lecturer(s): prof. Aleksandar Jurišić, PhD; prof. Aleksandra Petrović, PhD, doc. Ivana Ivanović, PhD			
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: 6			
Prerequisites: none			
Course Aims: Student education and training for independent species identification and determination of bioecological characteristics of animal groups in given natural conditions that can cause damage in plant production and other agricultural activities. Training students to apply appropriate control measures in accordance with good agricultural practice.			
Learning Outcomes: Students will gain theoretical and practical knowledge in animal species and group's identification and determination, calculation the damage threshold, type and degree of damage in plant production, as well as the ability to adequately assess and apply appropriate preventive and protective measures.			
Syllabus: <i>Theory</i> Importance and aim of agricultural zoology. Cell, tissue and organs morphology and anatomy. Comparative reviews of organ systems. Modern zoological classification. Protozoa: Metazoa. Mastigophora, Sarcodina, Sporozoa; Cnidosporidia, Ciliophora. Metazoa: Platyhelminthes, Trematodes; Cestodes. Nematode - general characteristics and life cycles, parasites of animals and humans. Annelida: Oligochaeta, Chirudinea. Arthropoda: general organization and systematics. Chelicerata - Araneae, Scorpiones, Pseudoscorpiones, Opiliones, Acarina. Branchiata, Tracheata - Myriapoda. Mollusca - type of organization and systematics - Gastropoda. Chordata - Vertebrata - embryonic development. Agnatha (Cyclostoma), Gnathostoma: Pisces, Amphibia, Reptilia, Aves, Mammalia. Ecological factors (abiotic and biotic, population ecology, biocenosis ecology, ecosystem, agroecosystems and agrocenosis. Animal ecology, abiotic, biotic and anthropogenic factors. Population ecology and biocenosis. <i>Practice</i> Microscope and microscopy techniques. Protozoa - infusoria. Cell, Tissues, Organs. Plathelminthes, Trematodes, Cestodes. Nematodes - animal parasites. Annelida, Crustacea, Myriapoda, Mollusca, Pisces, Amphibia, Reptilia, Aves, Mammalia – identification key. Phenology.			
Required Reading: Đukić N., Horvatović A., Kataranovski D., Maletin S., Matavulj M., Pujin V., Sekulić R., Jurišić A. (2018): Poljoprivredna zoologija sa ekologijom. Poljoprivredni fakultet, Univerzitet u Novom Sadu. Đukić N., Maletin S., Petrović A. (2018): Zooekologija. Poljoprivredni fakultet, Univerzitet u Novom Sadu. Poleksić, V. i sar. (2003): Zoologija. Poljoprivredni fakultet, Univerzitet u Beogradu.			
Weekly Contact Hours:	Lectures: 60	Practical work: 30	
Teaching Methods: Lectures: presentations and consultations; Practical classes: independent laboratory exercises with microscopic and macroscopic samples, calculations			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class	5	written exam	30

participation			
Practical work	5	oral exam	30
Preliminary exam(s)	30	
Seminar(s)			
<p>The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.</p>			