

Study Programme: ANIMAL SCIENCE			
Course Unit Title: Beekeeping			
Course Unit Code: 19.ANM031			
Name of Lecturer(s): PhD Pihler Ivan ass.prof.			
Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): summer			
Language of instruction: Serbian			
Mode of course unit delivery (face-to-face/distance learning): both			
Number of ECTS Allocated: 4			
Prerequisites:			
Course Aims: The acquisition of theoretical knowledge and practical skills in the field of modern beekeeping.			
Learning Outcomes: The student able to applies independently develop modern biotechnological methods of beekeeping. Creating conditions for further studies at higher levels of education in the field of biotechnical sciences.			
Syllabus: <i>Theory</i> History of beekeeping and its economic importance. Composition of a bee colony (parent, worker bees, drone). Types and breeds of bees. Anatomical morphological structure of honeybee (organs and senses). Reproduction of bees. Bee food and its sources. The life of a bee colony during the year. The bee's nest. Bee genetics. The selection and breeding of bees. Beekeeping methods (choice of sites for apiaries apiary and species; first spring work in the hive; Spring revision of bee nests, feeding, feeding bees; Preparation colony to exploit pasture; Resettlement Beehives in the frame hive; Grapple bees; The selection and execution of nuts; Natural swarming; Artificial education swarms; Moving bees to pasture; Preparing for wintering bee colonies; Bee colonies over the winter; The main bee products; Wheelbase plants and pollination; Protection of bees from pesticides. Diseases of beds: American plague; lime and stone litter; knife; European rot; Diseases of adult bees: Varroa and others. Pests bee: wax moth, bee yours, mice, ants, birds , wasps, hornets, etc.. <i>Practice</i> Beehives with movable and fixed comb; Artificial honeycomb and its use; Small beekeeping equipment and fixtures (with a field exercise); Mechanization in beekeeping (with a field exercise); Revocation and drainage wax and honey, pollen and royal jelly (with a field exercise); Rearing queens; The use of bee products in medicine, cosmetics and food industry; Terms of nectar secretion;			
Required Reading: 1. Kulinčević Jovan: Pčelarstvo. Partenon Beograd, 2012.			
Weekly Contact Hours: 4	Lectures: 2		Practical work: 2
Teaching Methods: Lectures, Practice/ Practical classes, Consultations, study, research work			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	6	written exam	
Practical work	8	oral exam	40
Preliminary exam(s)	38	
Seminar(s)	8		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			