

Course Unit Descriptor

Study Programme: Feeds, Crops And Vegetables
Course Unit Title: Beekeeping
Course Unit Code: 3ORT5I07
Name of Lecturer(s): Full Professor PhD Nada Plavša, Teaching Assistance MSc Jelena Stanivuk
Type and Level of Studies: Undergraduate Academic Studies
Course Status (compulsory/elective): elective
Semester (winter/summer): summer
Language of instruction: english
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 6
Prerequisites: No
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 (2009): PČELARSTVO, Primal Beograd. 2.Savić Radoslav, Čerimagić Husnija (1991): PČELARSTVO, NIRO, Zadrugar, Sarajevo. 3.Krivcov N.Ivanović, LebedevI. Vječeslav(2000):Tehnologija proizvodnje pčelinjih proizvoda, SPOS, Beograd. 4. Mladenov Stojmir, Radosavljević Milenko (1997): Lečenje pčelinjim proizvodima „Apiterapija“ i osnovi pčelarstva,

Ikom-Intelekt.

5. Plavša N., Nedić N.: Praktikum iz pčelarstva. Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2015.

Weekly Contact Hours: 4

Lectures:30

Practical work:30

Teaching Methods:

Lectures, and Practical classes, field Exercise

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	
Practical work	5	oral exam	50
Preliminary exam(s)	35	
Seminar(s)	5		

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