Course Unit Descriptor

Study Programme: Organic Production

Course Unit Title: Organic Beekeeping

Course Unit Code: 3OOP7I52

Name of Lecturer(s): Associate Professor PhD Nada Plavša, Associate Professor PhD Pihler Ivan, Teaching Assistant MSc Jelena Stanivuk

Type and Level of Studies: Undergraduate Academic Studies

Course Status (compulsory/elective): elective

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: 4

Prerequisites: None

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:

Theory

The economic importance of beekeeping, bee colony composition colony (bee queen, worker bees, drones). Types and breeds of bees. Anatomical morphological structure of honeybee (organs and senses). Reproduction of bees. The selection and breeding of bees. Apitecnics; - positioning of the apiaries apiary and species; Bee food and its sources, feeding bees; Preparation of the colony to exploit pasture; Natural swarming; Artificial education swarms; Moving bees to pasture; Preparing for wintering bee colonies; The main bee and products (honey, pollen, propolis, royal jelly, beeswax and bee larvae); Wheelbase plants and pollination; Diseases of bees and bee brood: nosemosis, acarosis, varroa, American and European plague; lime stone and litter; Insect disease; cold litter. Biological methods for the prevention of diseases of bees; Bee Pests: wax moth, bee yours, mice, ants, birds, wasps, hornets and others.

Practice

Types of hives (advantages and disadvantages); Artificial honeycomb (preparation and making hourly basis); Beekeeping equipment and fixtures (with a field exercise); Mechanization in beekeeping (with a field exercise); Revocation and squeezing honey, pollen and royal jelly (with a field exercise); Rearing queens; Terms of nectar secretion, control input nectar (bee scales), top dressing and feeding bees (the process of preparing and top dressing with sugar syrup and sugar-dough).

Required Reading:

1. Kulinčević Jovan (2009): PČELARSTVO, Primal Beograd.
2.Savić Radoslav, Ćerimagić Husnija (1991): PČELARSTVO, NIRO, Zadrugar, Sarajevo.
3.Krivcov N.Ivanovič, 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.
6. Morse R., Flottum K. 1997 Honey bee pests, predators and diseases Ohio, USA

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	20
Practical work	5	oral exam	40
Preliminary exam(s)	20	…….	
Seminar(s)	10		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			