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| Course: | **ORGANIC BEEKEEPING** |
| Course id: 3OOP7I52 |
| Number of ECTS: 4 |
| Teacher: |  Nada P. Plavsa, Ivan P. Pihler |
| Course status | Elective |
| Number of active teaching classes (weekly) |
| Lectures:15x2 = 30 | Practical classes:10x2 =20 | Other teaching types:2 x5= 10 | Study research work: | Other classes: |
| Precondition courses | - |
| 1. Educational goal

The acquisition and adoption of the basic principles of honeybee breeding, cognition the role of bees in pollination and protection of the environment, obtaining organic bee products. |
| 1. Educational outcomes

The ability of students to work independently after graduate; to implement advanced biotechnological methods of beekeeping production, and to improve production and protect the environment. |
| 1. Course content

**Theory lessons**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. **Practical teaching:** 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).  |
| 1. Teaching methods

Practices in beekeeping facilities , Laboratory work, movies, pp-presentations, study research work |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | Yes | 5 | Written exam | Yes | 20 |
| Test | Yes | 20 | Oral part of the exam | Yes | 40 |
| Exercise attendance | Yes | 5 |  |
| Term paper | Yes | 10 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Morse R., Flottum K. | Honey bee pests, predators and diseases | Ohio, USA | 1997 |
|  | Krivcov N.Ivanovič, Lebedev, I. Vječeslav | Tehnologija proizvodnje pčelinjih proizvoda,  | SPOS, Beograd. | 2000 |
|  | Kulinčević Jovan | PČELARSTVO | Primal Beograd | 2009 |
|  | Savić R., Ćerimagić Husnija  | PČELARSTVO, NIRO,  | Zadrugar, Sarajevo. | 1991 |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationBACHELOR ACADEMIC STUDIES ORGANIC PRODUCTION |
| Table 5.2 Course specification |