Course Unit Descriptor

Study Programme: Phytomedicine

Course Unit Title: Beneficial insects

Course Unit Code: 19.FT1016

Name of Lecturer(s): Prof. Aleksandra Ignjatovic-Cupina, Assoc. prof. Aleksandra Konjevic

Type and Level of Studies:Undergraduate academic studies

Course Status (compulsory/elective): elective

Semester (winter/summer):summer

Language of instruction: engl

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 6

Prerequisites: General entomology

Course Aims:
Getting to know the importance, biology, ecology and behavior of beneficial insects, ways of beneficial insects populations preserving and the possibilities of their breeding.

Learning Outcomes:
Acquiring knowledge and skills in recognizing beneficial insects, evaluating their importance in natural ecosystems, agro ecosystems and anthropogenic habitats, the correct approach to the preservation of natural populations and the possibilities of cultivation and use.

Syllabus:

Theory

Beneficial insects and their ecological and economic importance in natural and anthropogenic habitats. Relationships of beneficial insects with other organisms. Pollinators, predators and parasitoids and their importance in biological control. Insects as food for humans and domestic animals, insect products (food, medicines, supplements, cosmetics). Possibilities of cultivation and application of beneficial insects in agriculture, environmental protection, biodiversity conservation and food production: advantages and perspectives.

Practice

Morphological identification of beneficial insect orders, families and species. Practical introduction to methods and ways of monitoring beneficial insects, and estimation of population density.

Required Reading: Altieri M.A., Nicholls C.I.(2004): Biodiversity and Pest Management in Agroecosystems. Food Products Press, an Imprint of The Haworth Press, Binghamton, NY (USA). 236 pp.
Capinera, J. L. (2010): Insects and wildlife : arthropods and their relationships with wild vertebrate animals. Wiley-Blackwell, a John Wiley & Sons Ltd, Publication, Chichester, UK. 487 pp.
Rechcigl J. E., Rechcigl N. A. (2000): Insect pest management: techniques for environmental protection. Lewis Publishers, an imprint of CRC Press LLC, 392 pp.
Horne P., Page J. (2008): Integrated Pest Management for Crops and Pastures. Landlinks Press, Australia. 119 pgs.

Weekly Contact Hours: 3	**Lectures: 1**	**Practical work:2**

Teaching Methods: theoretical teaching: lectures using video presentations and modern didactic devices; practical classes: individual work of students on the identification of beneficial insect taxa with the use of the keys for identification and binocular magnifiers, visual demonstrations in the laboratory.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation	5	written exam	10
Practical work	5	oral exam	50
Preliminary exam(s)	10	…….	

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