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| Course: | *Zooecology* |
| Course id: 3ОСТ2И38 |
| Number of ECTS: 6 |
| Teacher: | **Aleksandar Jurišić, PhD., Aleksandra Petrović, MSc** |
| Course status | Elective |
| Number of active teaching classes (weekly) |
| Lectures: 2 | Practical classes: 2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None/navesti ako ima |
| 1. Educational goal

Introduction to the history and development of ecology as a science, basic environmental concepts and principles. Studying of the influence of abiotic and biotic factors and their effects on the processes of integrated agricultural production. Acquiring the knowledge of changes in the level of agroecosystems under the influence of anthropogenic factors. Studying the biology of beneficial species and the importance of biological control in agriculture. |
| 1. Educational outcomes

Formation of professional competence within sustainable agricultural production and integrated plant, animal and environmental protection middle. The student is qualified for further education through master's and PhD studies. |
| 1. Course content

*Lectures*: Introduction and history of ecology, animal ecology - definitions and basic concepts. The environmental conditions and the concept of ecological factors. Habitats and biotopes, life form, ecological niche. Abiotic factors, environmental optimum. Phenology. Soil. Chemistry of air and water environment. The biotic factors – population ecology: population density, spatial distribution; life tables. Fecundity and fertility, natality and mortality. The age structure, growth potential and maintenance of the population. Population theories. Biocenosis - the structure of benthic communities. Ecosystem - integrity, balance and classification. The changes in the ecosystem under the influence of anthropogenic factors. Agroecology - agricultural biotopes, agroecosystems. Basic characteristics and maintenance of agroecosystems. Biological control of parasites and diseases.*Exercise*: Abiotic factors - climate (temperature, light, humidity) and soil. The biotic factors - competition, mutualism, parasitism, predation. Biotope, life forms and ecological niche. Population, biocenosis, ecosystems. Agricultural biotopes - specific habitats and the effects of uniform complex environmental factors. Agrobiocenosis - a complex of primary and secondary factors in animal production. Homogeneity, ecological conditions of animal production. Agroecosystem - integrated effect of environmental factors. Ecological changes under the influence of anthropogenic factors. Biological control. Ecology and integrated plant, animal and environmental protection. |
| 1. Teaching methods

Lectures – oral, textual and illustrative / demonstrative methods.Practical classes - management of students’ individual work and demonstrative / illustrative methods |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam (izabrati) | Mandatory | Points |
| Lecture attendance | Yes | 5 | *Oral part of the exam* | Yes | 30 |
| Test | Yes | 30 |  |
| Exercise attendance | Yes | 5 |
| Colloquium | Yes | 30 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Ratajac R. | Zoologija za studente poljoprivrednog fakulteta | Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Novi Sad | 1995 |
|  | Đukić, N., Horvatović, A., Kataranovski, D., Maletin, S., Matavulj, M., Pujin, V., Sekulić, R. | Poljoprivredna zoologija sa ekologijom, I: Filozofija prirode, Opšta zoologija i Sistematika životinja | Poljoprivredni fakultet, Novi Sad | 2005 |
|  | Đukić, N., Maletin, S. | Poljoprivredna zoologija sa ekologijom II, Zooekologija | Poljoprivredni fakultet, Novi Sad | 1998 |
|  | Poleksić, V. i sar | Zoologija | Poljoprivredni fakultet, Univerzitet u Beogradu | 2003 |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE ACADEMIC STUDIES *ANIMAL SCIENCE* |
| Table 5.2 Course specification |