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| Course: | *Sustainable Agriculture* |
| Course id:3ОУВ6И43 |
| Number of ECTS:6 |
| Teacher: | Prof. dr Maja Manojlović, Doc. dr Srđan Šeremešić, Msc Klara Marijanušić |
| 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 |
| 1. Educational goal

The aim of this subject is explain the ecological trends in modern agriculture intended for production of safe food with the least impact on the environment.  |
| 1. Educational outcomes

Student should demonstrate the understanding of ecological dimension in crop production and to recognize the management practice that favors the sustainable development of the agroecosystem.  |
| 1. Course content

Introduction to sustainable agriculture. Interaction of sustainable agriculture and other systems of crop production. The importance of sustainable agriculture - agronomical, environmental, economic and social aspects. Legislation in organic agriculture. Management practices and their impact on the environment (soil, water, air). Tillage systems and their adjustments to the goals of sustainable agriculture. Importance of crop rotation and the basic principles for crop rotation introduction, preparation and evaluation. Importance of intercropping in sustainable agriculture. Knowledge, cultivation and uses of intercrops. Crop needs for fertilization. Nutrients cycles and anticipated losses of nutrients. Sources of nutrients for crops. The importance of organic and microbiological fertilizers. Introduction to balanced fertilization. Fertilization and environmental protection. Biological methods in crop protection. Buffer zones and strips, biodiversity in agroesystems.*Practical classes*: Visiting farms with different production systems (conventional, integrated, organic), introduction to applied management systems, evaluation and suggestions for improvement.  |
| 1. Teaching methods

Lectures, Practical classes, Consultations and Seminar papers.  |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam | Mandatory | Points |
| Lecture attendance | Yes | 10 | Oral part of the exam | Yes | 40 |
| Test | Yes | 30 |  |
| Exercise attendance | Yes | - |
| Practical classes oral exam  | Yes | 20 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Altieri, M. | Agroecology: The Science Of Sustainable Agriculture, Second Edition | Westview Press | 1995 |
|  | Lichtfouse, E., Navarrete, M., Debaeke, P., et al. | Sustainable Agriculture | Springer | 2009 |
|  | Adel El Titi | Soil Tillage in Agroecosystems | CRC Press | 2002 |
|  | Maja Manojlović (editor) | Đubrenje u održivoj poljoprivredi | Faculty of Agriculture, University of Novi Sad | 2008 |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE STUDIES (Water Management) |
| Table 5.2 Course specification |