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| Course: | *Ecotoxicology and Environmental Protection* |
| Course id: | 30РТ6024 |
| Number of ECTS: | 5 |
| Teacher: | Sanja D. Lazic, Ivana V. MaksimovićVojislava P. Bursić, Marina I. Putnik- Delić |
| Course status | Mandatory/Elective : Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 3x15=45 | Practical classes:15 | Other teaching types  | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

The knowledge about the pollution sources and types of pollutants in ecosystems and the measures to be taken in the process of agriculture production in order to prevent pollution of ecosystems.  |
| 1. Educational outcomes

The acquired-applicable knowledge in the field of ecotoxicology and environmental protection. |
| 1. Course content

Definition of ecotoxicology, circulation of matter and energy in nature, toxicity, toxicity testing, mutagens, cancerogenic, teratogenic, reproduction effects. Human expose to the toxic compounds and risk assessment. Pesticides – organochlorine insecticides, polychlorinated biphenyls, dioxins, polycyclic aromatic hydrocarbons. Concept, causes, types, level of pollution. Goals and assignments of agro-ecosystem protection. Basic characteristics and peculiarities of agro-ecosystem. Pollution and protection of air, water and soil– sources and classifications of pollutant, effects of pollution, possibilities of reducing negative effects in plant production. *Other teaching forms – laboratory exercises*: Determination of organochlorine insecticides, polychlorinated biphenyls and polycyclic aromatic hydrocarbons content in the environment. The determination of SO2, CO2, NH3 excess in air. Determination of inorganic and organic chemical pollution in water. Determination of heavy metals content in water, soil and plants and rebuilding polluted soil. Determination of nitrate content in plant material. |
| 1. Teaching methods: Lectures
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| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam (izabrati) | Mandatory | Points |
| Lecture attendance | Yes/No | 5 | *Theoretical part of the exam/Oral part of the exam/Written part of the exam-tasks and theory* | Yes | 85 |
| Test | Yes/No |  |  |
| Exercise attendance | Yes/No |  |
| *Term paper* | Yes/No | 10 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Kastori, R. | Zaštita agroekosistema | Feljton, Nov Sad | 1996 |
|  | Alloway, B., J. | Heavy metals in soil | Blackie, Glasgow | 1990 |
|  | Walker, C.H., Hopkin, S.P., Siblz, R.M., Peakall, D.B. | Principes of Exotoxicology | Tajlor&Francis, New York | 2006 |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationBACHELOR STUDIES OF FIELD AND VEGETABLE CROPS |
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