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| Course: | Environmental contaminants |
| Course id: 3MST1I22 |
| Number of ECTS: 6 |
| Teacher: | Igor M. Jajić, PhD, Associate Professor |
| 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

Expanding knowledge about accidental displacement of contaminants in the environment, their inclusion into the food chain and the negative impact on the health of the consumer. Getting to know the detailed legislation in this area in the EU and our country. |
| 1. Educational outcomes

Identifying the most important contaminants of food and the environment. Ability to apply knowledge about the importance of preserving the environment with active participation in projects related to this area. |
| 1. Course content

Theoretical classes: Pesticides: insecticides, rodenticides, fungicides, herbicides; chemical structures, the distribution in food chain, metabolism, residues in tissues, legislation. Heavy metals: arsenic, cadmium, nickel, lead, sources of poisoning the food chain distribution, metabolism, tissue residues, ecotoxicology, legal regulations. Industrial pollutants: polychlorinated biphenyls, dioxins, furans: sources of poisoning, the distribution in food chain, toxicity, metabolism, tissue residues, ecotoxicology, legal regulations. Mycotoxins: aflatoxin, ochratoxin, citrinin, zearalenone, ergot alkaloids, the distribution in the food chain, toxicity, metabolism, residues in tissues legislation. Preventive measures for the occurrence of mycotoxins in foods. Radionuclides: natural and artificial, the distribution in food chain, contaminating animal products, metabolism, monitoring, legislation. |
| 1. Teaching methods

Lectures, Practical classes, Consultations, research work |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam (izabrati) | Mandatory | Points |
| Lecture attendance | Yes/No | 5 | *Oral part of the exam* | Yes | 50 |
| Test | Yes/No |  |  |
| Exercise attendance | Yes/No | 5 |
| *Term paper* | Yes/No | 40 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | D’Mello, J.P.F. | Food Safety Contaminants and Toxins | Cab International, Wallingford, UK | 2003 |
|  | Sparks, L.D | Environmental soil chemistry | Academic Press, Elsevier | 2002 1995 |
|  | Jajić, I. | Kvalitet i bezbednost stočarskih proizvoda - Praktikum | Poljoprivredni fakultet, Novi Sad | 2013 |

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