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| Course: | *Outlines of Plant Protection* |
| Course id:3ОАЕ2О10 |
| Number of ECTS:5 |
| Teacher: | Marija F. Zgomba; Dušan S. Marinković |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 2 | Tutorials: 2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

Introducing students to pests, microorganisms, weeds, pesticides, economically significant pests, types and sizes of damage, plant protection organization, pesticide classification (by use, production form, chemical composition, toxicity), integral plant protection system and alternative methods of pest reduction.  |
| 1. Educational outcomes

Students will be able to recognize types of damage, realize the possibilities of protecting plants and environment from contamination and unwanted pesticide effects, and the importance of withholding period. They will be able to determine the maximum number of treatments. Students will also be able to determine damages caused by the activity of biotic and abiotic factors. |
| 1. Course content

*Theoretical instruction*Pests, microorganisms as pathogens, weeds and pesticides. Basic types of farming plant diseases and their suppression; most common diseases, symptoms. Economically important pests (insects, mites, nematodes, rodents, birds, snails), damage types, damage size and ways to suppressing it. Pesticide classification. Unwanted effects of pesticides. Plant protection methods. Integral plant protection system. Implementation of unconventional and ecologically acceptable strategies in plant protection. Types and size of damage caused by pathogens, pests and weeds. Plan protection regulations.*Practical instruction*Introduction to basic diseases (places of origin, symptoms, morphological characteristics, preconditions to spread the disease, biological parameters, and abiotic factors favourable to disease development). Dominant pests. Disease symptoms, damage types. Formulations of chemical and unconventional medicine. Determining doses and concentration of pesticides and biological agents. |
| 1. Teaching methods

Lectures and conversation. Illustrations, presentations of symptoms and pesticides on video. Practical methods include laboratory work, determining materials and parameters relevant for safe pesticide application.  |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lectures | Yes/No | 5 | Oral exam | Yes | 30-70 |
| Tests | Yes/No | 20 |  |
| Practical work | Yes/No | 20 |
| Preliminary tests | Yes/No | 25 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Čamprag D. | Integralna zaštita ratarskih kultura | Poljoprivredni fakultet, Novi Sad | 2000 |
|  | Almaši R., Almaši Š i Injac M. | Štetočine jabuke | Poljoprivredni fakultet, Novi Sad | 2004 |
|  | Šovljanski R., Lazić S. | Osnovi fitofarmacije | Poljoprivredni fakultet, Novi Sad | 2007 |
|  | Zgomba M. | Zaštita bilja | Poljoprivredni fakultet, Novi Sad | 2010 |