Study Programme: Agronomy

Course Unit Title: Integrated disease and pest management

Course Unit Code: 19.AGR110

Name of Lecturer(s): Full Professor Slavica Vuković, Full Professor Aleksandra Konjević, Full Professor Dragana Budakov

Type and Level of Studies: Doctoral Academic Studies

Course Status (compulsory/elective): elective

Semester (winter/summer): winter/summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): face-to-face/online

Number of ECTS Allocated: 10

Prerequisites: Methods of Scientific Work (Scientific Research Methods)

Course Aims: To enable students to master methods based on scientific principles; to develop constructive analysis; and to learn the basic and specific principles and measures in integrated plant protection.

Learning Outcomes:
Students will acquire knowledge about: the biology of phytopathogenic microorganisms, insect and other harmful organisms important for agricultural production; the properties and application of pesticides; and the basic and specific principles of integrated plant protection, which, together with other courses, provides a good foundation for implementing innovations or changes. Altogether, this will ensure the fundamental conditions for the production of safe and healthy food.

Syllabus:
Theory- Regulations in plant protection. Agrotechnical, mechanical, physical, and biological measures for controlling harmful organisms. Chemical control measures – advantages and disadvantages for the environment. Changes in the sensitivity of harmful organisms and strategies for preventing or delaying these changes. Principles of pesticide resistance management. Integrated plant protection measures.
Study research work The study research work is based on individual engagement aimed at gaining detailed knowledge of the morphology, anatomy, and biology of harmful organisms that can be used in designing integrated control programs. Students will become familiar with practical aspects, advantages, and disadvantages of different methods of pest control, as well as the preparation, design, and implementation of general and specific principles in strategies for controlling harmful species in agricultural production.

Required Reading:
George N. Agrios (2005): Plant pathology. 5th edition. Elsevir Academic Press.
Perić, I. i Ivanović, M. (ed) (1999): Integrated protection of field crops. Plant Protection Society of Serbia, Belgrade.
Štrbac, P., Čamprag, D. (2013): Integrated Plant Protection (Agrotechnical Measures) and Field Crop Pests. University of Novi Sad, Faculty of Agriculture, Novi Sad.
Janse, J.D. (2006): Phytobacteriology, Principles and Practice. CABI.
Copping, L. (2009): The Manual of Biocontrol Agents. A World Compendium, British Crop Production Council, United Kingdom.

Weekly Contact Hours:	**Lectures: 4**	**Study Research Work: 6**

Teaching Methods: Interactive teaching, consultations, practical work and demonstrations, research and review paper writing and commenting.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Seminar(s)	20	written exam	80
Practical work		oral exam	
Preliminary exam(s)		…….	

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.