Course Unit Descriptor

Study Programme: Agronomy

Course Unit Title: Advanced herbology 2

Course Unit Code: 19ДАГИ4138

Name of Lecturer(s): Full Prof. Bojan Konstantinović, PhD

Name of Associate(s): Assoc. Prof. Nataša Mandić, PhD; Sr. Rsch. Assoc. Jelena Gajić Umiljendić, PhD

Type and Level of Studies: Doctoral studies

Course Status (compulsory/elective): elective

Semester (winter/summer): summer

Language of instruction: English

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

Number of ECTS Allocated: 7

Prerequisites: -

Course Aims: Acquiring the knowledge on the weed species in cultivated plants, their spread and importance for agricultural and non-agricultural areas.

Learning Outcomes: The knowledge gained in this course expands the previously acquired knowledge of weed vegetation in cultivated crops and enables the selection of appropriate weed control measures during agricultural production.

Syllabus:

Theory

The knowledge of the basic biological characteristics of the weed species from the herbicide application point of view. Weeds in different production systems. The importance of having the knowledge of the agrophytocoenoses and agroecosystems for the selection and rational application of control measures, as well as the fight against pests and pathogens. Non-chemical weed control. Application of biological preparations in weed control. Organisms used in biological control of the weeds. Resistance and persistence. Molecular methods for resistance determination. Mathematical models for predicting weed emergence. Integrated weed management. Mechanical, physical and chemical weed control measures in different systems of production and tillage. Weed control measures in alternative agricultural production systems. The application of software packages for data analysis in the field of crop-weed interactions and for the evaluation of herbicide efficacy in weed control.

Practice

The application of the methods related to the preparation of the doctoral thesis. The interpretation of the results obtained by utilizing different research methods.

Required Reading:

Konstantinović, B. (1999): Poznavanje i suzbijanje korova. Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, Srbija.

Konstantinović, B., Bošković J. (2001): Biotehnologija u zaštiti bilja. Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, Srbija.

Konstantinović, B. (2008): Korovi i njihovo suzbijanje. Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, Srbija.

Konstantinović, B. (2011): Osnovi herbologije i herbicidi. Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, Srbija.

Konstantinović, B.I., Konstantinović, B. (2014): Osnovi herbologije i korovi urbanih sredina. Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, Srbija.

Konstantinović, B., Popov, M., Samardžić, N. (2021): Osnovi herbologije. Praktikum, Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, Srbija.

Weekly Contact Hours: 4+4	**Lectures: 60**	**Practical work: 60**

Teaching Methods:

Lectures - verbal-textual and demonstrative-illustrative methods. Writing the seminar paper from one of the foreseen areas of research.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation	10	written exam	
Practical work		oral exam	50
Preliminary exam(s)		…….	
Seminar(s)	40		