

<b>Study Programme: PHYTOMEDICINE</b>
<b>Course Unit Title: ADVANCED HERBOLOGY</b>
<b>Course Unit Code: 19.FT1008</b>
<b>Name of Lecturer(s): Full Prof. Bojan Konstantinović, PhD; Assoc. Prof. Nataša Mandić, PhD; Teaching Assistant Stefan Ugrinov, MSc</b>
<b>Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES PHYTOMEDICINE</b>
<b>Course Status (compulsory/elective): Compulsory</b>
<b>Semester (winter/summer): Summer</b>
<b>Language of instruction: English</b>
<b>Mode of course unit delivery (face-to-face/distance learning): face-to-face</b>
<b>Number of ECTS Allocated: 4</b>
<b>Prerequisites:</b> The conditions are in accordance with the ECTS system. The student is supposed to have passed the final exam of the courses Field and vegetable crops and The basics of herbology prior to taking the final exam.
<b>Course Aims:</b> The knowledge acquired by this course presents the upgrade of the previously gained knowledge in the field of Herbology and it is necessary for the students in order for them to choose the measures for the control of the resistant invasive and quarantine weed species.
<b>Learning Outcomes:</b> The students which have passed the course Advanced herbology will be able to choose the correct measures and timing for the weed control based on their gained knowledge by the accurate identification of the weed species and their economical importance.
<p><b>Syllabus:</b></p> <p><i>Theory</i></p> <p>Weed germination. Modeling of the germination percentage and intensity. Weed germination as the function of the seed plowing depth. The germination periods. The effect of the abiotic and biotic factors on the emergence and spreading of the weeds. The types of competitive relations with the crops. Allelopathy – the definition and history of researching this phenomenon. The critical period of the weed infestation and the level of economic damage. Nonchemical control measures. Seed cleaning. The proper care of the manure and compost. Mechanical control measures. Crop rotation. Tillage. Plowing. No-till farming. Harrowing and rolling. Fertilization. Irrigation. Biological control measures. The prediction of weed infestation on the agricultural land. Introduction of the information technology. Indirect and direct measures in order to develop the anti-resistance strategy. Indirect and direct control measures in the small grains, row crops, vegetable crops, perennial fruit and vine plantations, medicinal plants, legume plants, nursery production and forestry, irrigation and drainage canals, as well as the non-agricultural areas.</p> <p><i>Practice</i></p> <p>The basic biological characteristics of the important weed species of the families: Equisetaceae, Ranunculaceae, Rosaceae, Fabaceae, Papaveraceae, Fumariaceae, Brassicaceae, Violaceae, Polygonaceae, Portulacaceae, Caryophyllaceae, Chenopodiaceae, Amaranthaceae, Convolvulaceae, Verbenaceae, Boraginaceae, Lamiaceae, Solanaceae, Scrophulariaceae, Plantaginaceae, Rubiaceae, Sambucaceae, Asteraceae, Poaceae, Cyperaceae, Liliaceae, Alliaceae and Asparagaceae. Determination of the weeds and crops allelopathy.</p>
<p><b>Required Reading:</b></p> <p>Konstantinović, B. (2008): Korovi i njihovo suzbijanje, Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad.</p> <p>Konstantinović, B. (2011): Osnovi herbologije i herbicidi, Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad.</p>

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

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

<b>Weekly Contact Hours: 4+2</b>	<b>Lectures: 60</b>	<b>Practical work: 30</b>
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**Teaching Methods:**

**Lectures and Practical classes.**

**Knowledge Assessment (maximum of 100 points):**

<b>Pre-exam obligations</b>	Points 40	<b>Final exam</b>	Points 60
Preliminary exam(s)	20	oral exam	60
Colloquium	20		