

Study Programme: PHYTOMEDICINE
Course Unit Title: ADVANCED HERBOLOGY
Course Unit Code: 19.FT1008
Name of Lecturer(s): Assoc. Prof. Bojan Konstantinović, PhD; Asst. Prof. Nataša Samardžić, PhD
Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES PHYTOMEDICINE
Course Status (compulsory/elective): compulsory
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: 4
Prerequisites: 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
Course Aims: The knowledge acquired by this course represents 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.
Learning Outcomes: 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 determination of the weed species and their economical importance.
<p>Syllabus:</p> <p><i>Theory</i></p> <p><i>The weed germination. The modeling of the germination percentage and intensity. The 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 the history of researching this phenomenon. The critical period of the weediness and the economic injury level. 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 weediness prediction on the agricultural land. The 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.</i></p> <p><i>Practice</i></p> <p><i>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. The determination of the weeds and crops allelopathy.</i></p>
<p>Required Reading:</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> <p>Konstantinović, B. (2014): Osnovi herbologije i korovi urbanih sredina, Univerzitet u Novom Sadu, Poljoprivredni</p>

fakultet, Novi Sad.

Weekly Contact Hours: 4+2

Lectures: 60

Practical work: 30

Teaching Methods:

Lectures and Practical classes.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	Points 40	Final exam	Points 60
Preliminary exam(s)	20	oral exam	60
Colloquium	20		