


Discipline	Plant protection – part 1 (herbology)	code: 21	summer semester
Specialty	Agronomy		
ECTS credits: 6	Form of assessment: Exam		
Lecturer	Assoc. Prof. Dr. Petar Yankov Room 331 Phone: +359 52 385 725 E-mail: p_yankov@tu-varna.bg p_s_yankov@abv.bg		
Department	Plant Production		
Faculty	Faculty of Manufacturing Engineering and Technology		
<p>Learning objectives:</p> <p>The curriculum is intended for students of a Bachelor's degree program in Agronomy. During the course "Plant Protection – part 1 (Herbology)", the students acquire common knowledge about different groups of weeds (ephemerals, early spring, late spring, winter, winter, biennial and perennial) and methods of combating them (physicochemical, chemical, etc.). The biological classification, according to which grouping is based on the characteristics of growth, flowering and fruiting, is considered in detail. The characteristics of each group of weeds, the agricultural crops most frequently encountered, the agro-technical and chemical means used to control them shall be indicated. The latest achievements in the field of synthesized organic herbicides are studied.</p> <p>The main focus is on integrated weed control in the country's main field and vegetable crops, perennials, oil and medicinal crops, etc. in close connection with specific biotopes (arable land, meadows, pastures, ponds, etc.).</p> <p>Herbology as a science is related to other disciplines (botany, ecology, general agriculture, plant growing, physiology, agrometeorology). Knowledge of them, especially botany, helps students to identify and group weeds according to their biological classification.</p>			

CONTENTS:		
Training Area	Hours lectures	Hours seminar exercises
Morphological, biological and ecological characteristics of weeds. Biological groups of weeds - non-parasitic monocarpous weeds, non-parasitic polycarpic weeds, parasitic and semi-parasitic weeds. Weed associations and their investigation.	10	10
Weed control methods. Herbicides – mechanisms of phytotoxic and selective action of herbicides, persistence of herbicides in the soil, classification of herbicides by chemical groups.	10	10
Integrated weed control in basic field and vegetable crops, in perennial plantations – orchards and vineyards.	10	10
TOTAL: 60 h	30	30