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| Discipline | PLANT PROTECTION, PART 1 (HERBOLOGY) code: 21 summer semester | |
| Specialty | AGRONOMY | |
| ECTS credits: 6 | Form of assessment: Exam | |
| Lecturer | Assoc. prof. Peter Yankov PhD Room NUK 331 Phone: +359 52 385 725 E-mail: p_yankov@tu-varna.bg | |
| Department | PLANT PRODUCTION | |
| Faculty | <i>FACULTY OF MECHANICAL ENGINEERING AND TECHNOLOGIES</i> | |

Learning objectives:

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.

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.).

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.

CONTENTS:

| Training Area | Hours lectures | Hours seminar exercises |
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| Definition of the term weed. Weed damage. | 2 | |
| Biological groups of weeds. | 7 | |
| Weed control methods. Herbicides. | 9 | |
| Integrated control of weeds in main agricultural crops. | 12 | |
| Classification of weeds. | | 4 |
| Work with herbarium. | | 4 |
| Identification of weeds in different phases and agrocenoses. | | 8 |

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| Characterization of herbicides in the main field, vegetable and perennial crops. | | 8 |
| Application of herbicides: preparation, dose per hectare, effect and period of application. | | 6 |
| TOTAL: 60 h | 30 | 30 |