**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **Botany** | | | | |
| **Study programme** | **Professional undergraduate study Winemaking** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 1. | **Semester** | W | **ECTS credits** | 4 |
| **Goals of a course** | | | | | |
| To acquaint students with the composition and functions of the plant organism, the reproduction and characteristics of particular groups of plants | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Learning outcomes on a level of a study programme which includes course** | | | | | |
| Outcome 1: Plan the planting of vineyards with regard to the ecological and agro-climate conditions of the production unit.  Outcome 3: Perform the care of the grapevine plantations in accordance with the cultivation form and maintain the vineyard in view of the technological and ecological conditions of production | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Substantiate the importance of the cell as the basic building and functional unit of life 2. Distinguish plant tissues and organs and their role in plant life 3. Compare the differences between vegetative and generative plant propagation 4. Show the structure and main features of individual groups of plants, and identify wild and cultivated species 5. Prepare native plant material preparations and use microscopy techniques | | | | | |
| **Content of a course** | | | | | |
| Introduction into Botany – features of lively beings; differences between plants and animals; importance of plants in the environment and in man’s life; botany and its division. Cytology – cell structure. Morphological levels of organisation. Histology – constitute and material cells. Anatomy and morphology of vegetative organs. Anatomy and morphology of generative organs. Plant multiplication. Systematic descriptions – systematic categories and nomenclature; systematic descriptions of lower-order ones – bacteria, algae, fungi and lichens – emphasis on plant parasites and those of higher-order plants (moss, ferns, spermatophyta) – including survey of families of cultivated plants belonging to monocotyledons and dicotyledons and weed.  Exercises: Microscope and its use; Structure of epidermal cell of onion. Cell colonies and germination – yeasts; Anatomic structure of annual and biennial vine stalk. Anatomic structure of vine leaf and root. Vine bud in longitudinal section. Flower and inflorescence of vine. Fruit and seed of vine. Morphological differences between monotyledons and dicotyledons. | | | | | |
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