**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **Ecology** | | | | |
| **Study programme** | **Professional undergraduate study Winemaking** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 1. | **Semester** | W | **ECTS credits** | 5 |
| **Goals of a course** | | | | | |
| Introduce students to basic ecological concepts, ecosystem functioning, ecosphere and human impact on parts of the ecosphere. Introduce students to the ecological challenges of today and the basic guidelines of sustainable development, sustainable and organic agriculture. | | | | | |
| **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  Outcome 4: Determine the economically significant grapevine pests and implement preventative and curative methods of plant protection. | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Comment on basic ecological concepts, functioning and state of the ecosystem. 2. Assess the consequences of anthropological activities on the ecosphere and its parts. 3. Analyse agricultural production systems based on ecological concepts and principles 4. Propose environmentally friendly cultivation methods for agricultural grapevine production systems 5. Apply environmentally friendly protection measures for agricultural production systems of Mediterranean crops. | | | | | |
| **Content of a course** | | | | | |
| Definition, history and significance of ecology. Basic ecological terms: biotope, population, biocenosis, ecosystem. Matter cycles and energy flows in ecosystem. Food chains. Ecosphere and its components. Man's impact on environment. Biosphere. Biodiversity and agents of its reduction. Sustainable growth and ecological efficiency. Abiotic and biotic interacting components. Biological tolerance. Agrosphere. Critical points of agrosphere. Organic agriculture. Agro ecological indicators. IFOAM. Ecological agents of pest control. Vineyard as ecosystem. Main abiotic and biotic factors affecting growth of vine. Ecological control of insects and diseases in vineyard. Assessment of ecological acceptability in treating vine with various insect controlling agents. | | | | | |
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