**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **Winemaking I** | | | | |
| **Study programme** | **Professional undergraduate study Winemaking** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 1. | **Semester** | S | **ECTS credits** | 4 |
| **Goals of a course** | | | | | |
| By mastering the course material, students are able to carry out independent vinification of white, rose and red wine (theoretical background) and can control the basic parameters in wine production in the laboratory (practical experience of analysing wine in the laboratory). | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Learning outcomes on a level of a study programme which includes course** | | | | | |
| Outcome 5: Interpret the role of microorganisms and apply adequate cultures in wine production.  Outcome 6: Analyse the basic chemical composition of grape must and make corrections of crushed grapes, grape must and wine  Outcome 8: Apply the appropriate vinification technology for white, rose and red wine with monitoring and determining technological processes, and carry out physic-chemical and biological stabilization of wine. | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Explain the importance of individual groups of chemical constituents in grapes and grape must and interpret their characteristics 2. Make a basic chemical analysis of grape must 3. Perform the necessary and proper correction of grape must or crushed grapes 4. Use basic technologies in the production of white, rose and red wine | | | | | |
| **Content of a course** | | | | | |
| History of wine making. Chemical composition of grapes. Chemical composition of must: most important characteristics of main ingredients: sugar, organic acids, polyphenols, enzymes, minerals, etc. Processes of grape ripening. Wine cellars: purpose, type, size. Wine vessels and machines. Preparing cellars. Deciding on vintage time and vintage. Corrections made in must before fermentation: setting levels of sugar and acids, sugar adding, decreased and increased acidification. Must protection from oxidation. White wine vinification: characteristics, grape crushing, pressing (types of presses), protection from oxidation, fissure of pure must (spontaneous, filtering, centrifuging), activation of yeasts, alcoholic fermentation, spontaneous, controlled - cold, equipment and vessels used for controlled fermentation, violent and calm fermentation, decanting. Red wine vinification: grape crushing, maceration (classical and thermo-vinification, warm-cold), carbonic maceration (technology, characteristics), factors affecting maceration. Rose wine vinification. technology, characteristics. | | | | | |
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