

## Syllabus

### Course description

<b>Course title</b>	Enology 1: Principles of Enology
<b>Course code</b>	43053
<b>Scientific sector</b>	AGR/15
<b>Degree</b>	Bachelor in Agricultural and Agro-environmental Sciences
<b>Semester</b>	Summer School
<b>Year</b>	I, II, III
<b>Academic year</b>	2016/17
<b>Credits</b>	3
<b>Modular</b>	

<b>Total lecturing hours</b>	18
<b>Total lab hours</b>	
<b>Total exercise hours</b>	12
<b>Attendance</b>	
<b>Prerequisites</b>	Basic knowledge of chemistry and physics
<b>Course page</b>	

<b>Specific educational objectives</b>	<p>The course both gives a general overview of scientific contents and is designed for acquiring professional skills and knowledge</p> <p>Educational objectives</p> <p>(a) provide an adequate knowledge and critical approach to develop projects related to the production of various types of wine and other winery products, taking into account innovative technologies;</p> <p>(b) provide adequate knowledge of the technical aspects related to the official wine regulations.</p>
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<b>Lecturer</b>	<p>Emanuele Boselli, BZ L5.00, emanuele.boselli@unibz.it, +39 0471 017217,  <a href="https://www.unibz.it/en/faculties/sciencetechnology/academic-staff/person/37607-emanuele-boselli">https://www.unibz.it/en/faculties/sciencetechnology/academic-staff/person/37607-emanuele-boselli</a></p>
<b>Scientific sector of the lecturer</b>	AGR/15 Food Science and Technology
<b>Teaching language</b>	English
<b>Office hours</b>	Before and after the lectures
<b>Teaching assistant (if any)</b>	-
<b>Office hours</b>	
<b>List of topics covered</b>	History of enology. Grape berry composition, determination of the date of the harvest; crushing and pressing of the grapes;

	<p>techniques of must correction; flow-chart of the main winemaking techniques. Technological aspects of sulfur dioxide; technological aspects of fermentation. Colloidal state and colloidal stability of the wine; elaboration of white wines. Stabilization of wines. Elaboration of red wines. Ageing of wine, closure systems. Carbonic maceration. Defects and alterations of wines. Essential concepts on sparkling wines, special wines, vinegars, grappa, brandy. Participation in conferences and / or technical fairs, visit to wineries and/or factories related to the topics of the course.</p>
<b>Teaching format</b>	Frontal lectures, exercises, projects

<b>Learning outcomes</b>	<p>The learning outcomes need to refer to the Dublin Descriptors:</p> <p><b>Knowledge and understanding</b>  (a) adequate knowledge and understanding about the development of projects related to the production of various types of wine and other winery products, taking into account innovative technologies; (b) adequate knowledge of the technical aspects related to the official wine regulations</p> <p><b>Applying knowledge and understanding</b>  (a) developing the capability of integration of information, both in horizontal way (technological, chemical, biological, and regulatory aspects involved in each processing technology) and in vertical way (reasonable sequence of processes along the wine production chain);  (b) Capability of carrying out strategies for the optimization of a technological or biotechnological process in the wine sector; (c) capability of evaluating the potentiality of innovative technologies.</p> <p><b>Making judgments</b>  capability of identify the information be needed to improve the efficiency of the processes and the quality of the winery products;</p> <p><b>Communication skills</b>  capability of clearly and exhaustively communicate notions, ideas, problems and technical solutions to interlocutors, either professional or not, representative of the various and specific competencies in the wine supply chain (agronomist, engineers, biologists, chemists, nutritionists, administrators)</p> <p><b>Learning skills</b>  To get the learning skills that are necessary to continue to undertake further study in the sector of enology with a good level of autonomy.</p>
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<b>Assessment</b>	<ul style="list-style-type: none"> <li>Written and project work: written exam with review questions and written project report done in groups on a topic related to enology</li> </ul>
<b>Assessment language</b>	English
<b>Evaluation criteria and criteria for awarding marks</b>	<p>Successful completion of the examination will lead to grades ranging from 18 to 30 with honors (50% written and 50% project work).</p> <ul style="list-style-type: none"> <li>relevant for written exam: clarity of answers, mastery of language (also with respect to teaching language), ability to summarize, evaluate, and establish relationships between topics;</li> <li>relevant for project work: ability to work in a team, creativity, skills in critical thinking, ability to summarize in own words</li> </ul>
<b>Required readings</b>	Keynotes by the lecturer
<b>Supplementary readings</b>	<p>Ribéreau-Gayon P., Dubourdieu D., Donèche B., Lonvaud A. – Handbook of Enology – Vol. I and II – free pdf version available in the internet</p> <p>OIV technical standards and documents</p> <p><a href="http://www.oiv.int/en/technical-standards-and-documents">http://www.oiv.int/en/technical-standards-and-documents</a></p>