

### DESCRIPTION OF A STUDY COURSE – SYLLABUS

<b>Title of a course</b>	<b>Winemaking II</b>				
<b>Head of course</b>	<b>PhD Mario Staver, College Professor</b>				
<b>Study programme</b>	<b>Professional undergraduate study Mediterranean Agriculture</b>				
<b>Status of a course</b>	Obligatory				
<b>Year of study</b>	3.	<b>Semester</b>	V	<b>ECTS credits</b>	5
<b>Teaching plan (L + E + S+ Pr)</b>	2 + 1 + 0 + 2				
<b>Goals of a course</b>					
By mastering the course material, students are able to relate the biochemical process and microbiological influence on alcoholic fermentation, to recognize the basic aromas of wine (primary, secondary and tertiary) and to carry out the stabilization and finalization of wine.					
<b>Conditions for enrolling course</b>					
No conditions					
<b>Learning outcomes on a level of a study programme which includes course</b>					
Outcome 3: Prepare a plan for the cultivation of Mediterranean crops, including economic and cultivation elements. Outcome 8: Conduct correction of crushed grapes, grape must and wine on the basis of chemical composition and apply new technologies in wine production, care, stabilization and finalization.					
<b>Expected learning outcomes on a level of a course</b>					
<ol style="list-style-type: none"> <li>1. Explain the importance of individual groups of chemical constituents in grapes, grape must and wine and interpret their characteristics</li> <li>2. Perform chemical analysis of grape must and basic chemical analysis of wine.</li> <li>3. Determine the physical, chemical and biological stability of wine.</li> <li>4. Select the appropriate wine filtration process.</li> <li>5. Choose the appropriate wine bottling equipment and packaging.</li> <li>6. Describe wine diseases and defects.</li> <li>7. Use the legislation (Act and Regulations on wine).</li> </ol>					
<b>Content of a course</b>					
Alcoholic fermentation: classification of yeasts, selected yeasts, activators and inhibitors of fermentation. Malolactic fermentation of malic acid. Wine deposits: iron, copper, tartars, proteins. Wine clarification: types of clarifying agents and use. Wine filtering and centrifuging: types of filters and their operation effects. Processes of stabilisation: physical stabilisation, stabilisation of deposits of metals, colloids, tartars, chemical stabilisation, biological stabilisation. Bottling: bottling equipment, types of bottling and corking devices, labelling. Wine aging: oxido-reduction processes, ester forming, transformation of components of red wine colour. Wine aromas: primary-varietal: flowery, fruity, grassy; secondary-pre-fermentative, fermentative; tertiary. Wine failures and diseases. Wine made of raisins. Special wine: dessert, liqueur, aromatised wines. Sparkling wine: natural and pearl wine. Barrique wine: way of production, types of oak barrels. Wine tasting: colour, clarity, aroma-flavour, balance and quality. Legislative: Law of Wine, Wine Regulations.					
<b>Teaching modes</b>	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
<b>Comments</b>					
<b>Students' obligations</b>					

**Grading, evaluation and monitoring of students' work continuously during lectures and exams**

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

**Continuous check-up:**

Outcomes	Pre-exam I	Laboratory exercises	Sensory analysis	Practical work	Threshold	Max
Outcome 1	8	5	/	/	6,5 %	13 %
Outcome 2	/	15	/	/	7,5 %	15 %
Outcome 3	10	10	/	4	12 %	24 %
Outcome 4	5	/	/	4	4,5 %	9 %
Outcome 5	5	/	/	4	4,5 %	9 %
Outcome 6	7	5	10	/	11 %	22 %
Outcome 7	4	/	/	4	4 %	8 %
Percentage of ECTS	2	1,5	0,5	1	-	-
Total	39 %	35%	10%	16 %	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

**Exam term:**

Outcomes	Written exam	Oral exam	Threshold	Max
Outcome 1	10	10	10 %	20 %
Outcome 2	20		10 %	20 %
Outcome 3	20		10 %	20 %
Outcome 4	10		7,5 %	15 %
Outcome 5	10		7,5 %	15 %
Outcome 6	/	10	5 %	10 %
Outcome 7	10			
Percentage of ECTS	3	2		
Total	80 %	20 %	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

**Grading:**

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good(4)	B
60,00 – 74,99	Good(3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

**Obligatory literature**

1. Mario Staver<sub>1</sub>, Kristijan Damijanić, Siniša Petrović Vinarstvo II, Skripta za studente stručnog studija Vinarstva i stručnog studija Mediteranske poljoprivrede, Nakladnik: Veleučilište u Rijeci, 2017. ISBN 978-953-6911-90-5
2. Zoričić, M. (1996): Podrumarstvo, Hrvatsko obiteljsko gospodarstvo, Zagreb
3. Zoričić, M. (1998): Crna i ružičasta vina, Hrvatsko obiteljsko gospodarstvo, Zagreb

<b>Additional literature</b>
<ol style="list-style-type: none"><li>1. Mario Staver, Sanja Radeka, Vinarstvo I, Skripta za studente stručnog studija Vinarstva i stručnog studija Mediteranske poljoprivrede, Nakladnik: Veleučilište u Rijeci, 2011. ISBN 978-953-6911-65-3</li></ol>

