DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	**Hygiene and maintaining**				
Head of course	**PhD Urška Kosić, Lecturer**				
Study programme	**Professional undergraduate study Winemaking**				
Status of a course	Elective				
Year of study	3	**Semester**	V	**ECTS credits**	4
Teaching plan (L + E + S+ Pr)	2+1+0+0				
Goals of a course					
Adopt basic principles and types of hygiene in the food industry. Distinguish between disinfection, desi section and pest control.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 6: Analyse the basic chemical composition of grape must and make corrections of crushed grapes, grape must and wine. Outcome 7: Recommend and implement methods of eliminating disease and wine defects. 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. Outcome 9: Finalize the wine by selecting the appropriate equipment and packaging and bottling the wine.					
Expected learning outcomes on a level of a course					
1. Adopt basic concepts of hygiene. 2. Distinguish types of hygiene. 3. Adopt foodstuffs hygiene. 4. Distinguish disinfection, disinfection and pest control procedures. 5. Adopt basic principles of hygiene in the food industry.					
Content of a course					
Hygiene of air. Hygiene of soil. Hygiene of water. Microbiology of water. Pollution of water. Treatment of waste water. Food hygiene. Microorganisms in food products. Food spoiling. Toxins of bacteria, fungi and algae. Preservation methods of food products. Sterilization. Methods of sterilization. Disinfection. Cleaning agents and disinfectants. Disinfectants: modes of action. Principles of «CIP». Disinfection. Insects in general: properties and species of interest. Agents in disinfection. Modes of action. Deratization. Rodents in general: properties and species of interest. Basic principles of rodents elimination. Food processing plants and equipment. General and specific demands in construction of processing plants – ventilation, water, light, materials. HACCP systems in food processing plants. Hygiene of personnel. Sanitary inspection and legislation.					
Teaching modes	☒ lectures ☐ auditory exercises ☒ seminars and workshops ☐ distance learning ☐ field classes		☒ individual assignments ☐ multimedia and network ☐ laboratory ☐ supervisor's work ☐ other _____		
Comments					
Students' obligations					
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	Practical work	Threshold	Max
Outcome 1	**10 %**		**5 %**	**10 %**
Outcome 2	**20 %**		**10 %**	**20 %**
Outcome 3	**10 %**		**5 %**	**10 %**
Outcome 4	**20 %**		**10 %**	**20 %**
Outcome 5	**20 %**	**20 %**	**20 %**	**40 %**
Percentage of ECTS	**3**	**1**	**-**	**-**
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.

Exam term:

Outcomes	Written exam	Oral exam	Threshold	Max
Outcome 1	**10 %**		**5 %**	**10 %**
Outcome 2	**20 %**		**10 %**	**20 %**
Outcome 3	**10 %**		**5 %**	**10 %**
Outcome 4	**20 %**		**10 %**	**20 %**
Outcome 5	**20 %**	**20 %**	**20 %**	**40 %**
Percentage of ECTS	**3**	**1**	**-**	**-**
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. Kendić S., Ćatović A. "Higijena i sanitacija" – Bihać, 2006
2. Duraković S. "Mikrobiologija namirnica" – Zagreb
3. Asaj A. "Deratizacija u praksi" – Zagreb, 1999
4. Asaj A. " Zdravstvena dezinsekcija u nastambama i okolišu" – Zagreb, 1999

Additional literature

1. Manual of food quality control – Food and Agriculture Organization, Washington, 1993
2. Checcacci, L., Meloni, C. – Igiene, CEA, 2002