

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Preservation of agricultural products				
Head of course	PhD Urška Kosić, Lecturer				
Study programme	Professional undergraduate study Mediterranean Agriculture				
Status of a course	Obligatory				
Year of study	3.	Semester	VI	ECTS credits	5
Teaching plan (L + E + S+ Pr)	2+1+0+0				
Goals of a course					
Familiarity with the methods of preservation and technological characteristics of certain methods of preservation of agricultural products. Getting acquainted with the methods of proper preservation and storage of agricultural products.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 9: Recommend raw materials, tools and method of preserving Mediterranean crops and bee products. Outcome 10: Interpret virgin olive oil production technology.					
Expected learning outcomes on a level of a course					
Outcome 1: Adopt the basic concepts of preservation. Outcome 2: Classify agricultural raw materials. Outcome 3: Distinguish preservation methods. Outcome 4: Use household preservation methods. Outcome 5: Describe the equipment and packaging of the preserved products.					
Content of a course					
General aspects and methods of conservation. Technological aspects of agricultural products as raw material for processing and preservation. Handling with agricultural products during and after harvest. Technologies of the preservation of agricultural products; heat sterilization preservation, cool preservation, freeze preservation, preservation as concentration, dry preservation, biological preservation (fermentation), preservation with additives, preservation with ionized radiation, combined and other methods of preservation. Secondary raw materials, additives and supporting means in preservation of agricultural products. Devices and equipments for preservation of agricultural products. Packaging and packing material for preserved agricultural products. Preservation of agricultural products in households.					
Teaching modes	<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 _____		
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	Independent tasks	Threshold	Max
Outcome 1	20 %		10 %	20 %
Outcome 2	20 %		10 %	20 %
Outcome 3	20 %	10 %	15 %	30 %
Outcome 4	10 %	10 %	10 %	20 %
Outcome 5	10 %		5 %	10 %
Percentage of ECTS	4	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	20 %		10 %	20 %
Outcome 2	20 %		10 %	20 %
Outcome 3	20 %	10 %	15 %	30 %
Outcome 4	10 %	10 %	10 %	20 %
Outcome 5	10 %		5 %	10 %
Percentage of ECTS	4	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. Mujić I., Alibabić V. "Tehnološki procesi konzerviranja hrane"- Bihać, 2006
2. Lovrić T., Piližota "Konzerviranje i prerada voća i povrća" – Zagreb, 1994

Additional literature

1. Improving the thermal processing of foods, Richardson Food processing technology: Principles and practice (Second edition), Fellows
2. Practical dehydration (Second edition), Greensmith
3. Food preservation by pulsed electric fields: From research to application
4. Processing fruits: Science and technology (Second edition), Barrett, Somogyi, Ramaswamy
5. Processing vegetables: Science and technology, Smith, Cash, Nip, Hui

