DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	**Botany and basics of genetics**				
Head of course	**PhD Vesna Kovačević, College Professor**				
Study programme	**Professional undergraduate study Mediterranean Agriculture**				
Status of a course	Obligatory				
Year of study	1	**Semester**	I	**ECTS credits**	5
Teaching plan (L + E + S+ Pr)	(3+1+0+0)				

Goals of a course

To acquaint students with composition and functions of the plant organism, the reproduction, characteristics of particular groups of plants and the basic laws of inheritance of traits.

Conditions for enrolling course

No conditions

Learning outcomes on a level of a study programme which includes course

Outcome 1: Assess the quality of planting material and produce planting material by the appropriate propagation method.
Outcome 3: Prepare a plan for the cultivation of Mediterranean crops, including economic and cultivation elements.
Outcome 4: Perform the care of perennial plantations of Mediterranean crops in accordance with the cultivation form and maintain them in view of the technological and ecological conditions of production.

Expected learning outcomes on a level of a course

1. Substantiate the importance of the cell as the basic building and functional unit of life
2. Distinguish plant tissues and organs and their role in plant life
3. Compare the differences between vegetative and generative plant propagation
4. Show the structure and main features of individual groups of plants, and identify wild and cultivated species
5. Prepare native plant material preparations and use microscopy techniques.
6. Explain basic concepts related to the processes and phenomena of inheritance and variability of living beings and plants

Content of a course

Introduction into Botany – features of lively beings; differences between plants and animals; importance of plants in the environment and in man's life; botany and its division. Cytology – cell structure. Morphological levels of organis. Histology – constitute and material cells. Anatomy and morphology of vegetative organs. Anatomy and morphology of generative organs. Plant multiplication. Systematic descriptions – systematic categories and nomenclature; systematic descriptions of lower-order ones – bacteria, algae, fungi and lichens – emphasis on plant parasites and those of higher-order plants (moss, ferns, spermatophyte) – including survey of families of cultivated plants belonging to monocotyledons and dicotyledons and weed.
Exercises: Microscope and its use; Structure of epidermal cell of onion. Cell colonies and germination – yeasts; Anatomic structure of annual and biennial vine stalk. Anatomic structure of vine leaf and root. Vine bud in longitudinal section. Flower and inflorescence of vine. Fruit and seed of vine. Morphological differences between monotyledons and dicotyledons.

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

Required attendance at exercises. Students must have a notebook of completed activities (individual assignments and exercises) that are reviewed and scored.

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	Pre-exam 2	Activity	Assignment	Threshold	Max
Outcome 1	9		1		5	10
Outcome 2	12	12	2	4	15	30
Outcome 3	9		1		5	10
Outcome 4	8	16	2	4	15	30
Outcome 5				8	4	8
Outcome 6	10		2		6	12
Percentage of ECTS	*2*	*1*	*0,5*	*1,5*		
Total	48	28	8	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	Max
Outcome 1	9	1	10
Outcome 2	26	4	30
Outcome 3	9	1	10
Outcome 4	26	4	30
Outcome 5	-	8	8
Outcome 6	10	2	12
Percentage of ECTS	*4*	*1*	
Total	80 %	20 %	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. Dubravec, K. 1996: BOTANIKA. Sveučilište u Zagrebu. Agronomski Fakultet.

2. Dubravec, K. i Dubravec, I. 1998: Kultivirane biljne vrste Hrvatske i susjednih područja. Školska knjiga, Zagreb.
3. Dubravec, K. i Šegulja, N. 2005: Korovi obradivih površina Istre. Veleučilište u Rijeci, Poreč.

Additional literature

1. Nikolić, T. 2017: MORFOLOGIJA BILJAKA. Alfa, Zagreb
2. Nikolić, T. 2013: SISTEMSKA BOTANIKA. Alfa, Zagreb
3. Hulina, N. 2011: VIŠE BILJKE STABLAŠICE. Golden marketing – Tehnička knjiga, Zagreb