

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Plant protection I				
Head of course	PhD Ivana Dminić Rojnić, Senior Lecturer				
Study programme	Professional undergraduate study Mediterranean Agriculture				
Status of a course	Obligatory				
Year of study	1	Semester	II	ECTS credits	4
Teaching plan (L + E + S+ Pr)	2+1+0+1				
Goals of a course					
Through theoretical and practical classes, students gain knowledge and learn about the importance and importance of plant protection in plant production, plant pests, measures and methods of protection, the distribution of plant protection products, their application, mechanism of action, hazards and risks of application, and environmental protection.					
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 2: Recommend the production technology for vegetables and medicinal plants outdoors and in protected areas according to the requirements of a certain species, and evaluate the quality of vegetables and aromatic herbs on the basis of internal and external quality.					
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.					
Outcome 6: Determine economically significant pests and implement preventative and curative methods of plant protection with respect to the production system.					
Expected learning outcomes on a level of a course					
1. Determine the term plant protection.					
2. Define the plant protection approach and systems (integrated and environmentally friendly plant protection).					
3. Know plant protection products.					
4. Define methods and measures of plant protection products application.					
5. Recommend methods and measures for the protection of Mediterranean crops against pests (pests, plant diseases and weeds).					
6. Assess the impact of the protection measures application on humans, animals and the environment.					
Content of a course					
Introduction and legal regulations. General terms related to plant pests. Plant protection (phytomedicine): term, measures, integrated plant protection, ecological production. Plant protection agents (phytopharmacy) – general part: production and consumption; registration of agents; division of agents; poisoned state of agents in case of man; residues of agents on agricultural products; selection of agents related to currency and purpose; poisoned state in case of animals, plants and environment; measures for protection of persons and environment; procedure in case of poisoning; pest resistance; form of agents; combined agents; mixture of agents; preparation of agents; application of plant protection agents; importance of warning signs and notes; currencies regulated for plant protection agents in Croatia. Plant protection agents (phytopharmacy) – special part: zoocides (insecticides, acaricides nematocides, limacides, rodenticides, corvicides); fungicides; herbicides; specific plant protection agents. Mechanical and physical aids in plant protection.					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory		

	<input type="checkbox"/> distance learning <input type="checkbox"/> field classes	<input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____
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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 1	Pre-exam 2	Practical Teaching Report	Creating an entomological collection	Assignment	Threshold	Max
Outcome 1	10		2	5	5	11	22
Outcome 2	10				5	7,5	15
Outcome 3	10		2			6	12
Outcome 4		15	2		10	13,5	27
Outcome 5		10	2			6	12
Outcome 6		10	2			6	12
Percentage of ECTS	1	1	0,75	0,25	1		
Total	30	35	10	5	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	Max
Outcome 1	15	7	22
Outcome 2	10	5	15
Outcome 3	10	2	12
Outcome 4	15	12	27
Outcome 5	10	2	12
Outcome 6	10	2	12
Percentage of ECTS	3	1	4
Total	70	30	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
<ol style="list-style-type: none"> 1. Ciglar, I. (1998.): Integrirana zaštita voćaka i vinograda, Zrinski d. d. Čakovec 2. Grupa autora (2015): Priručnik za sigurno rukovanje i primjenu sredstava za zaštitu bilja. Ministarstvo poljoprivrede i HCPHS- Zavod za zaštitu bilja 3. Igrc Barčić, J., Maceljski, M., (2001): Ekološki prihvatljiva zaštita bilja od štetnika. Zrinski, Čakovec 4. Kišpatić, J. (1988): Opća fitopatologija. Liber, Zagreb 5. Oštrec, Lj, Gotlin Čuljak, T. (2005): Opća entomologija, Zrinski, Čakovec
Additional literature
<ol style="list-style-type: none"> 1. Grupa autora (svakogodišnje izdanje broj 1-2): Glasilo biljne zaštite, HDBZ, Zagreb 2. Ivezić, M. (2003.): Štetnici vinove loze i voćaka. Veleučilište u Požegi; Veleučilište u Rijeci. 3. Jurković, D., Čosić, J. (2003.): Zaštita vinograda i voćnjaka od uzročnika bolesti. Veleučilište u Požegi 4. Maceljski, M., Cvjetković, B., Ostojić, Z., Barić, B. (2006.): Štetočinje vinove loze, Zrinski d. d. Čakovec

