

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Plant Protection				
Head of course	PhD Melita Zec Vojinović, Senior Lecturer				
Study programme	Professional undergraduate study Sustainable Agritourism				
Status of a course	Obligatory				
Year of study	2.	Semester	IV	ECTS credits	5
Teaching plan (L + E + S+ Pr)	2+0+2+1				
Goals of a course					
Introduce students to principles of plant protection in practice. To develop students' skills for monitoring the occurrence and to determine symptoms of pests in fruit and vegetable crops. To enable student to choose an appropriate sustainable system of fruit and vegetable production on the family farm.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 2: Assess the suitability of environmental and edaphic factors for sustainable plant and animal production. Outcome 3: Select species, assortments and breeds, as well as the technology for cultivation, breeding and maintaining the health of plants and animals. Outcome 7: Recommend environmentally friendly methods of hygiene, maintenance and waste management in agriculture, tourism and catering.					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> Determine the occurrence and noxiousness of a particular pest on vegetables, fruits and grapevine Choose the method and technique for the protection of vegetables, fruits and grapevine from pests Create a sampling plan to assess the incidence of pests Determine the most important pests on vegetables, fruits and grapevine Recommend sustainable systems for the protection of vegetables, fruits and grapevine with regard to the needs and opportunities of an agritourism farm 					
Content of a course					
Economically significant pests in cultivation of vegetables, fruit and vine, monitoring methods and repression methods. Plant pathology – term, definition of diseases and their agents. Epidemiology and plant disease forecasting. Taxonomy of plant diseases. The significance and role of applied entomology. Morphology, anatomy and physiognomy of insects. Methods of monitoring entomofauna in vegetable, fruit and vine cultivation. Taxonomy of insects. Definition of weeds, weed classification, most common weeds in cultivation of vegetables, fruit and vine, weed damage. Systems of integrated and ecological plant protection in cultivation of vegetables, fruit and vine.					
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	Assignment	Home assignment	Threshold	Max
Outcome 1		15		7,5	15
Outcome 2	20			10	20
Outcome 3		25		12,5	25
Outcome 4	15			7,5	15
Outcome 5			25	12,5	25
Percentage of ECTS	2	2	1	2,5	5
Total	40%	40%	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		15
Outcome 2	16	4	20
Outcome 3	25		25
Outcome 4	12	3	15
Outcome 5	25		25
Percentage of ECTS	4,5	0,5	
Total	90%	10%	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. Ivezić, M. Štetnici vinove loze i voćaka. Veleučilište u Požegi; Veleučilište u Rijeci, 2003.
2. Jurković, D., Čosić, J. Zaštita vinograda i voćnjaka od uzročnika bolesti. Veleučilište u Požegi, 2003.
3. Maceljki, M. Poljoprivredna entomologija, Zrinski d.d. Čakovec, 2002.
4. Maceljki, M., Cvjetković, B., Ostojić, Z., Barić, B. Štetočinje vinove loze, Zrinski d. d. Čakovec, 2006.
5. Raspudić, E. i sur. Najznačajniji štetnici, bolesti i korovi u uzgoju povrća. Osječko-baranjska županija, Osijek, 2009.

Additional literature

1. Bažok, R., Gotlin Čuljak, T., Grubišić, D. Integrirana zaštita bilja od štetnika na primjerima dobre prakse. Glasilo biljne zaštite 5, 2014.
2. HDBZ, grupa autora, Glasilo biljne zaštite, (svakogodišnje izdanje broj 1-2), Zagreb

3. Bokulić, A. i sur. Priručnik za sigurno rukovanje i primjenu sredstava za zaštitu bilja. Ministarstvo poljoprivrede i HCPHS- Zavod za zaštitu bilja, 2015.
4. Igrc Barčić, J., Maceljski, M., Ekološki prihvatljiva zaštita bilja od štetnika. Zrinski, Čakovec, 2001.
5. Oštrec, Lj, Gotlin Čuljak, T. Opća entomologija, Zrinski, Čakovec, 2005.

