Study programme: Vegetable growing - 4 YEAR STUDY PROGRAMME DIPLOMA: Graduated agricultural engineer – Vegetable grower, Baccalaureat (NQF VI A)

General programme for the first three years is identical for all study programme

CODE	VII SEMESTER – FOURTH YEAR									
CODE	COURSE	Credits	Classes	Total						
2ZF111612	Special vegetable growing	8	3+2+2	216						
2ZF111712	Vegetable growing in greenhouses	8	3+2+2	216						
2ZF111812	Plant breeding and seed production in vegetable growing	6	2+2+1	156						
Faculty elective course		4	2+1+1	120						
	Faculty elective course	4	2+1+1	120						
Вкупно:		30	12+8+7	828						
CODE	VIII SEMESTER – FOURTH YEAR									
CODE	COURSE	Credits	Classes	Total						
2ZF111912	Biotechnology and biosafety	6	2+2+1	156						
2ZF100312	Plant protection in vegetable growing	6	2+2+1	156						
	University elective course	6	2+2+1	156						
	Faculty elective course	4	2+1+1	120						
	Graduation thesis	8	0+0+8	192						
	Total:	30	8+7+12	780						

CODE	Faculty elective courses VII semester							
2ZF112012	Seedling production	4	2+1+1	120				
2ZF112112	Floriculture	4	2+1+1	120				
2ZF112212	Practical work in the vegetable growing	4	2+1+1	120				
2ZF120612	Vegetable processing	4	2+1+1	120				
	Faculty elective course VIII semester							
2MF103712	Quality management	4	2+1+1	120				
2ZF106012	Farm management	4	2+1+1	120				

Code	University elective courses VII sen	University elective courses VII semester and VIII semester							
UGD102212	Fundamentals of Tourism	6	2+2+1	156					
UGD102312	Earth Sciences	6	2+2+1	156					
UGD102412 Physics		6	2+2+1	156					
UGD102512	Biology	6	2+2+1	156					
UGD102612	Health care	6	2+2+1	156					
UGD102012	History of Art	6	2+2+1	156					
UGD102112	National history	6	2+2+1	156					

Appendix No.3 Syllabus	for th	e first, second a	nd th	nird cycle of st	udy					
1. Course title		Special vegetable	grov	wing						
2. Course code		2ZF111612								
3. Study programme:		Vegetable growin	g – F	our year study						
4. Organizers of the study		University "Goce[•	•					
programme (faculty, institute group)	-	Agriculture, Depa	rtme	nt for Plant pro	ductio	n				
5. Level of study (first, second third cycle)	l,	First cycle								
6. Academic year / semester		Fourth year/ seventh semester		Number of EC credits	TS	8				
8. Professor		Ass. prof. Ph.D Milan Georgievski								
9. Preconditions for course enrollment		/								
10. Goals of the course program			je of	special vegetal	ole gr	owing.				
vegetable species. 2. Classic classification by the length of the are used as food. 3. Root croblack root, white root). 4. Bulbour Tuber vegetables (potato, sweetables (cabbage, leafy of sprouts, Chinese and Peking vegetable (tomato, pepper, egbeans, broad beans, sugar artichoke, zealous). Content of the exercises: Pradin the theoretical part of teaching agro - technical measures in the	11. Content of the course programme: Content of the lectures: 1. Task and purpose of the case, the centres of origin of vegetable species. 2. Classification of vegetable species (botanical classification, classification by the length of the life cycle, classification according to plant organs which are used as food. 3. Root crops (carrots, parsley, parsnips, dill, beets, radish, turnips, black root, white root). 4. Bulbous vegetables (onion, garlic, leek, scarf, winter onions). 5. Tuber vegetables (potato, sweet potato, Jerusalem artichoke). 6, 7 and 8. Leafy vegetables (cabbage, leafy cabbage, kale, alabash, cauliflower, broccoli, Brussels sprouts, Chinese and Peking cabbage, chicory salad, spinach). 9, 10 and 11. Fruit vegetable (tomato, pepper, eggplant, watermelon, cucumber, pumpkin, tea, peas, green beans, broad beans, sugar corn). 12. Perennial kinds of vegetables (horseradish, artichoke, zealous). Content of the exercises: Practical knowledge of the morphology of the species included in the theoretical part of teaching. Field exercises. Introducing the concrete application of									
12. Methods of study: Lectures, independent seminar work; lea		•		•		retical and practical exercises, consultations, making				
13. Total amount of available tim		216 hours				•				
14. Distribution of the available	time	3+2+2								
15. Forms of teaching						•				
activities	15.1.	Lectures - theor	etica	l training		•				
activities	15.1. 15.2.	Lectures - theor Practice (laborat workshops, outre teamwork	ory,	auditory),		m tests.				
16. Other forms of activities		Practice (laborat workshops, outre	ory,	auditory),		rm tests.				
	15.2.	Practice (laborat workshops, outre teamwork	ory, each	auditory),		rm tests.				
	15.2. 16.1.	Practice (laborat workshops, outre teamwork Team projects	ory, each	auditory),		m tests. 3 2				
	15.2. 16.1. 16.2.	Practice (laborat workshops, outre teamwork Team projects Individual projec	ory, each	auditory),		3 2 /				

		Successf	ully implemented lab	/ th	neoretical exercises		10		
	17.2.	Project a	ctivities (oral and writ	tten	presentation)		10		
	17.3.	Other for	ms of studying activit	ies			10		
18.	Crite	ria for ass	sessment (points /	to	50 points	5(five) (F)			
		g	rade)	fro	om 51 to 60 points	6(six) (E)			
				fro	om 61 to 70 points	7(seven) (D)			
				fro	om 71 to 80 points	8(eight) (C)			
				fro	om 81 to 90 points	9(nine) (B)			
				fro	om 91 to 100 points	10(ten) (A)			
19.	Condi	tion for g	etting a signature	60	0% of term activities of	or minimum 42 points	from		
	and ta	king the	final exam	2	mid-term exams, proj	ect activities and atte	ending		
				to	lectures and discuss	ions			
20.	_	•	nich classes are	М	acedonian				
	condu								
21.			itoring the quality	S	elf-evaluation, periodi	cal tests for the stud	ents,		
		truction		Sl	ırvey.				
22.	Litera	ture							
		Compuls	ory literature						
	Ordinal Author	Title		Publisher	Year				
	number								
		1.	Бранка Лазић и	П	Іовртарство	Универзитет у	1998		
			cop.			Новом Саду			
						Полопривредни			
	22.1.					факултет			
		2.	Лазар Алаџајков		Специјално	Универзитет	1966		
				L	радинарство	"Кирил и			
						Методиј" -			
			To locality	_		Скопје	0000		
		3.	Jovan Todorović,		atarsko-povrtarski	Laktaši	2003		
			Branka Lazić,	þ	riračnik				
		A dditions	Ilija Komljenović						
						5			
		Ordinal	Author		Title	Publisher	Year		
		number	Поличествення		Питания и	Cuaria	4007		
		1.	Даниел Јанкуловс	КИ	Пиперка и	Скопје	1997		
	22.2.				патлиџан				
	۷۷.۷.	2.	Д. Симонов		(монографија) Диња и лубеница	Скопје	1995		
		۷.	Д. СИМОНОВ		(монографија)	CKUTIJE	1990		
		3.	Д. Симонов		(монографија) Кромид, лук и	Скопје	1992		
		J.	Д. Симонов		праз	CKUIJE	1332		
					праз (монографија)				
					(MOHOI Pawilja)				

App	endix No.3 Syllabu	s for th	e first, second a	nd t	hird cycle of stu	udy		
1.	Course title		Vegetable growin	g in	greenhouses			
2.	Course code		2ZF120612					
3.	Study programme:		Vegetable growin	g –	Four year study			
4.	Organizers of the study		University "Gocel	Delc	ev"- Stip, Faculty	of		
	programme (faculty, institu		Agriculture, Depa		•		n	
	group)				·			
5.	Level of study (first, secon	d,	First cycle					
	third cycle)							
6.	Academic year / semester		Fourth year/	7.	Number of ECT	S	8	
			seventh		credits			
			semester					
8.	Professor		Ass. prof. Milan Georgievski, Ph.D					
9.	Preconditions for course		/					
	enrollment							
10.								
	technique of vegetable production in greenhouses.							
11.	Content of the course programme:							
	Content of the lectures: 1.	Importa	nce and purpose	of p	production in gre	enho	uses. 2.	
	Types of greenhouses. 3. F	Place fo	r growing plants	in	greenhouses. 4	4. Pla	ace and	
	organization of the greenhou	se. 5. G	Prowing conditions	s an	d their regulation	n (he	at, light,	
	water, air relative humidity, a	ir and so	oil). 6. Sowing an	d pla	anting. 7. Seedlir	ng pro	oduction	
	and seeding. 8. General mea	asures (of care in greenh	ouse	es. 9. Opportuni	ties f	or using	
	greenhouses. 10. Vegetable	product	tion in protected	area	is (tomato, pepp	er, e	ggplant,	
	young potatoes). 11. Cucumb	er, wate	ermelon, salad, le	afy c	chicory, spinach,	onio	n, garlic,	
	leek, winter onion.12. Cabba	ge, Chin	iese cabbage, cai	uliflo	wer, broccoli, pa	rsley	, radish,	
	beet, carrot, green beans).							
	Content of the exercises: (•		•			
	and greenhouses, parts, dir	nension	s, calculation of	the	necessary elem	nents	for the	
	production of hot beds. Sche	edule of	f protected areas	, ch	arging beds. Fie	ld ex	rcises.	
	Introducing the concrete app	lication	of technical mea	sure	es in the cultivati	on o	f certain	
	crops, preparation for product	tion in g	reenhouses, moni	itorir	ng the process of	finisl	ning and	
	packing vegetables. Visiting re	efrigerat	ed warehouses ar	nd st	orage facilities fo	r veg	jetables.	
12.	Methods of study:							
	Lectures, theoretical and prac				• .	dent	seminar	
	work; learning home; exam p	•	ry classes and m	id-te	rm tests.			
13.	Total amount of available ti		216 hours					
14.	Distribution of the available		3+2+2					
15.	Forms of teaching	15.1.	Lectures - theor				3	
	activities	15.2.	Practice (laborate	•	• • •		2	
			workshops, outr	each	n and			
			teamwork					

16.1.

16.2.

Team projects

Individual projects

16.

Other forms of activities

			16.3.	lr	ndividual study			1	
17.	Forms	s of asses	sment			-			
	17.1.	Exams (r	nid-term exams, exa	ım,	electronic testing)			70	
		Successf	ully implemented lab) / t	heoretical exercises			10	
	17.2.	Project a	ctivities (oral and wr	itte	n presentation)			10	
	17.3.	Other for	ms of studying activi	ties	3			10	
18.	Crite	ria for ass	sessment (points /	to	o 50 points	5(five) (F)	5(five) (F)		
		gı	rade)	fı	rom 51 to 60 points	6(six) (E)			
				fı	rom 61 to 70 points	7(seven) (D)			
				fı	rom 71 to 80 points	8(eight) (C)		
					rom 81 to 90 points	9(nine) (B)			
					rom 91 to 100 points	10(ten) (A)			
19.		•	etting a signature		60% of term activities of		•		
	and ta	iking the f	final exam		mid-term exams, pro	·	and atte	ending	
00		!	data atau ana ana		o lectures and discuss	sions			
20.	condu	_	nich classes are	IV.	Macedonian				
21.			itoring the quality	- C	Self-evaluation				
21.		truction	itoring the quality		den-evaluation				
22.									
			ory literature						
		Ordinal	Author	1	Title	Publishe	or.	Year	
		number	Adition		TILLE	Fublishe	51	i c ai	
		1.	Бранка Лазић	Г	Іовртарство	Уневерзите	T V	1998	
			r		- F - F -	Новом Сад	-		
						Пољопривр	едни		
	22.1.					факултет			
		2.	Mihal Đurovka i		roizvodnja povrća i	Универзите	•	2005	
			sar.		veća u zaštićenom	Новом Сад	•		
				p	rostoru	Пољопривр	едни		
		2	Γρομμο Πορμέμ	2	OUTUTOUIA EDOCTORIA	факултет		2007	
		3.	Бранка Лазиќ и		аштитени простори вторизирани	Скопје		2007	
			др.		редавања				
		Additiona	l al literature	1	родаваньа				
		Ordinal	Author		Title	Publishe	r	Year	
		number	7 (3.110)		11110		•	. ca.	
		1.	Branka Lazić I sar.		Povrće iz	Универзитет	y	2001	
	22.2.				plastenika	Новом Саду			
						Пољопривре	едни		
						факултет			
		2.	Ružica Lešići dr.		Povrće iz vlastitog	Nakladni zav		1987	
					vrta	Znanje, Zagr	eb		

					(treče izmenje dopunjeno izdanje).	eno i					
	3.										
App	endix No.3		Syllabus	s for th	e first, second a	nd t	hird cycle of st	udy			
1.	Course ti	tle			Plant breeding ar	nd se	eed production in	vege	etable		
2.	Course c	ode			2ZF111812						
3.	Study pro	ogram	me:	,	Vegetable growing – Four year study						
4.	Organize	rs of t	he study		University "Gocel	Delc	ev"- Stip, Faculty	of of			
	programm group)	ne (fa	culty, institut	е,	Agriculture, Depa	artme	ent for Plant proc	luctio	n		
5.		-	(first, second	l,	First cycle						
6	third cyc		/ semester		Courth Moor/	7	Number of ECT	TC	6		
6.	Academic	c year	/ Semester		Fourth year/ seventh	7.	credits	3	6		
					semester		Credits				
8.	Professo	r			Ass. prof. Dragica Spasova, Ph.D						
9.	Preconditions for course /										
	enrollme										
10.	Goals of	the co	urse progran	nme: Th	ne course aims a	t app	olying acquired k	nowle	edge of		
					ection for the cre				-		
	in certain	vegeta	ble crops, pro	pagatio	n and maintenan	ice tl	nrough seed prod	ductio	n per		
	individual	metho	ds in separate	e crops.							
11.	Content	of the	course progr	amme:							
					for selection of			popu	ulations:		
	_		•	-	that have vegeta		•				
				•	otypes in certain	-		_			
					es, fruit vegetab						
					id offspring. Ap						
	_	• •			logy in the sele control, process		•				
	_	•	ermining the q		•	onig,	Storage and v	vaicin	ousing).		
			•		ection of elite pla	ants	and their labora	torv a	nalvsis.		
					t plant species.			•	•		
			•		eriments and sta		•		•		
	Introduction	on to m	nethods of tes	ting qua	lity properties of	seed	ds for vegetables	3.	ŕ		
12.	Methods	of stu	dy:								
	· ·		•		rcises, consultati		• .	dent	seminar		
	work; learning home; exam preparatory classes and mid-term tests.										
13.			f available tir		156 hours						
14.			the available		2+2+1						
15.	Forms of		ing	15.1.	Lectures - theo				2		
	activities			15.2.	Practice (labora	-	* *		2		
					workshops, outr	each	n and				
					teamwork						

16.	Other	forms of	activities	16.1.	Team projects		/			
				16.2.	Individual projects		0,5			
				16.3.	Individual study		0,5			
17.	Forms	s of asses	ssment			I				
	17.1.	Exams (ı	mid-term exan	ns, exan	n, electronic testing)		70			
		Success	fully implemen	ited lab	/ theoretical exercises		10			
	17.2.	Project a	ctivities (oral a	and writ	ten presentation)		10			
	17.3.	Other for	ms of studying	g activiti	ties					
18.	Crite	ria for ass	sessment (po	ints /	to 50 points	50 points 5(five) (F)				
		g	rade)		from 51 to 60 points	6(six) (E)				
					from 61 to 70 points	7(seven) (D)				
					from 71 to 80 points	8(eight) (C)				
					from 81 to 90 points	9(nine) (B)				
			_		from 91 to 100 points	10(ten) (A)				
19.		U	etting a signa	ature	60% of term activities	•				
	and ta	aking the	final exam		2 mid-term exams, pro	=	tending			
00					to lectures and discus	sions				
20.	Language in which classes are conducted				Macedonian					
21.	Method of monitoring the quality				Self-evaluation					
	of ins	truction								
22.	Litera	ture								
		Compuls	ory literature							
		Ordinal	Author		Title	Publisher	Year			
		number								
		1.	Верица Или		Општа селекција, учебник	УГД-Штип	2012			
		2.	Драгица		Селекција и	УГД-Штип	2011			
			Спасова		семепроизводство -					
					Интерна скрипта за					
	22.1.				студентите од					
					Земјоделски					
		0	Dalia I		факултет	A	0000			
		3.	Beljo, J.		Oplemenjivanje bilja	Agronomski fakultet – Mostar	2006			
		4.	Цветанка	-	Селекција на	УКИМ,	1997			
			Најчевска		растенијата со	Земјоделски				
					семепроизводство	факултет. Скопје				
		A 1 1141	1.124		(практикум)					
			al literature							
	20.0	Ordinal	Autho	r	Title	Publisher	Year			
	22.2.	number	Max Y /	1	0	Delianostronado	4000			
		1.	Мартинčиć,		Оплемењивање	Poljoprivredni	1996			
			Козумплик, І	D.	биља, Загреб.	fakultet -Osijek,				

				Agronomski fakultet - Zagreb	
	2.	Marić, M. Miodrag	Semenarstvo	Izdavačka kuća	2005
				DRAGANIĆ,	
				Beograd	
	3.				

App	endix No.3 Syllabu	s for th	e first, second a	nd t	hird cycle of study	<u> </u>		
1.	Course title		Seedling product	ion				
2.	Course code		2ZF112012					
3.	Study programme:		Vegetable growin	ng –	Four year study			
4.	Organizers of the study		University "Gocel	Delc	ev"- Stip, Faculty of			
	programme (faculty, institut	e,	Agriculture, Depa	artme	ent for Plant produc	tion		
	group)							
5.	Level of study (first, second	d,	First cycle					
	third cycle)							
6.	Academic year / semester		Fourth year/	7.	Number of ECTS	4		
			seventh		credits			
			semester					
8.	Professor		Ass. prof. Milan Georgievski, Ph.D					
9.	Preconditions for course		/					
	enrollment							
10.	Goals of the course program	nme: T	he students acqui	ire k	nowledge in the are	a of		
	seedling production.	ng production.						
	<u> </u>							
11.	Content of the course progr							
11.	Content of the course progr Content of the lectures: Fan	niliariza	tion with seedling	•	•	Ū		
11.	Content of the course progr Content of the lectures: Fan production (in open field a	niliariza and in	tion with seedling greenhouses),	conc	litions for growing	seedling		
11.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela	niliariza [.] and in ative hu	tion with seedling greenhouses), o midity of air and s	conc	litions for growing air and soil), ways o	seedling of seedling		
11.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an	niliariza and in ative hu d in c	tion with seedling greenhouses), o midity of air and s containers), prep	conc soil, a	litions for growing air and soil), ways o on of mixture for	seedling of seedling seedling		
11.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and	niliariza and in ative hu d in c d sowin	tion with seedling greenhouses), or midity of air and secontainers), prepared and care of see	conc soil, a arati	litions for growing air and soil), ways on of mixture for gs, tempering and s	seedling of seedling seedling eeding.		
11.	Content of the course progr Content of the lectures: Fam production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Pr	niliariza and in ative hu d in c d sowin actical	tion with seedling greenhouses), or midity of air and sometimes), prepared and care of see acquaintance with	conc soil, arati edling	litions for growing air and soil), ways on of mixture for gs, tempering and so ways of seedling p	seedling of seedling seedling eeding. oroduction,		
11.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and	niliariza and in ative hu d in c d sowin actical	tion with seedling greenhouses), or midity of air and sometimes), prepared and care of see acquaintance with	conc soil, arati edling	litions for growing air and soil), ways on of mixture for gs, tempering and so ways of seedling p	seedling of seedling seedling eeding. oroduction,		
	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing.	niliariza and in ative hu d in c d sowin actical	tion with seedling greenhouses), or midity of air and sometimes), prepared and care of see acquaintance with	conc soil, arati edling	litions for growing air and soil), ways on of mixture for gs, tempering and so ways of seedling p	seedling of seedling seedling eeding. oroduction,		
11.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing.	niliariza and in ative hu d in c d sowin actical I quality	tion with seedling greenhouses), or midity of air and sontainers), prepay and care of see acquaintance with of seedlings, fie	conc soil, arati edling h the	litions for growing air and soil), ways of mixture for gs, tempering and se ways of seedling paxercises, visiting factors.	seedling of seedling seedling eeding. oroduction, acilities for		
	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Pr establishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and prace	niliariza and in ative hu d in c d sowin ractical I quality	tion with seedling greenhouses), or midity of air and secontainers), prepay and care of see acquaintance with of seedlings, fied ercises, consultations	conc soil, arati edling h the eld e	litions for growing air and soil), ways of seedling parents of the second of the secon	seedling of seedling seedling eeding. oroduction, acilities for		
12.	Content of the course progr Content of the lectures: Fam production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and pract work; learning home; exam pr	niliariza and in ative hu d in c d sowin ractical I quality tical exe	tion with seedling greenhouses), or midity of air and scontainers), prepay and care of see acquaintance with or of seedlings, fiedercises, consultationy classes and m	conc soil, arati edling h the eld e	litions for growing air and soil), ways of seedling parents of the second of the secon	seedling of seedling seedling eeding. oroduction, acilities for		
12.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Pr establishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and pract work; learning home; exam pr Total amount of available tire	niliariza and in ative hu d sowin ractical I quality tical exe eparato	tion with seedling greenhouses), or midity of air and scontainers), prepagand care of see acquaintance with or seedlings, fiest ory classes and market 120 hours	conc soil, arati edling h the eld e	litions for growing air and soil), ways of seedling parents of the second of the secon	seedling of seedling seedling eeding. oroduction, acilities for		
12. 13. 14.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and practively work; learning home; exam presume the course of the available time.	niliariza and in ative hu d in c d sowin ractical I quality tical exe eparato ne time	tion with seedling greenhouses), or midity of air and sontainers), prepayed and care of see acquaintance with or of seedlings, field ercises, consultations classes and mid 120 hours	cond soil, a arati edling the the eld e	litions for growing air and soil), ways of on of mixture for gs, tempering and se ways of seedling pexercises, visiting farmaking independent tests.	seedling of seedling eeding. oroduction, acilities for		
12.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and practively work; learning home; exam prestablishment of available time. Distribution of the available Forms of teaching	niliariza and in ative hu d in o d sowin ractical I quality tical exe eparato ne time	tion with seedling greenhouses), or midity of air and sontainers), prepay and care of see acquaintance with of seedlings, fiest ory classes and more than 120 hours 2+1+1 Lectures - theorems.	cond soil, arati arati edling h the eld e	litions for growing air and soil), ways of on of mixture for gs, tempering and se ways of seedling pexercises, visiting farmaking independent tests.	seedling of seedling seedling eeding. oroduction, acilities for at seminar		
12. 13. 14.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and practively work; learning home; exam presume the course of the available time.	niliariza and in ative hu d in c d sowin ractical I quality tical exe eparato ne time	greenhouses), or midity of air and sontainers), prepared and care of see acquaintance with or of seedlings, field are classes and material process. The containers of the cont	conc soil, a arati edling to the eld e	litions for growing air and soil), ways of on of mixture for gs, tempering and se ways of seedling pexercises, visiting farmaking independent tests.	seedling of seedling seedling eeding. oroduction, acilities for		
12. 13. 14.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and practively work; learning home; exam prestablishment of available time. Distribution of the available Forms of teaching	niliariza and in ative hu d in o d sowin ractical I quality tical exe eparato ne time	tion with seedling greenhouses), or midity of air and scontainers), prepay and care of see acquaintance with or of seedlings, fiest ercises, consultations classes and middle and the containers of the containers	conc soil, a arati edling to the eld e	litions for growing air and soil), ways of on of mixture for gs, tempering and se ways of seedling pexercises, visiting farmaking independent tests.	seedling of seedling seedling eeding. oroduction, acilities for at seminar		
12. 13. 14. 15.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and practivities Total amount of available time. Distribution of the available Forms of teaching activities	niliariza and in ative hu d in o d sowin ractical I quality tical exe eparato ne time 15.1.	tion with seedling greenhouses), or midity of air and sontainers), prepayed and care of see acquaintance with of seedlings, fiest ercises, consultations classes and multiple to the consultations are classes are	conc soil, a arati edling to the eld e	litions for growing air and soil), ways of on of mixture for gs, tempering and se ways of seedling pexercises, visiting farmaking independent tests.	seedling of seedling seedling eeding. oroduction, acilities for at seminar		
12. 13. 14.	Content of the course progr Content of the lectures: Fan production (in open field a (temperature, light, water, rela production (conventional an production, time of sowing and Content of the exercises: Prestablishment categories and seedling manufacturing. Methods of study: Lectures, theoretical and practively work; learning home; exam prestablishment of available time. Distribution of the available Forms of teaching	niliariza and in ative hu d in o d sowin ractical I quality tical exe eparato ne time	tion with seedling greenhouses), or midity of air and scontainers), prepay and care of see acquaintance with or of seedlings, fiest ercises, consultations classes and middle and the containers of the containers	conc soil, a arati edling to the eld e	litions for growing air and soil), ways of on of mixture for gs, tempering and se ways of seedling pexercises, visiting farmaking independent tests.	seedling of seedling seedling eeding. oroduction, acilities for at seminar		

				16.3.	Individual study			0,5
17.	Forms	s of asses	sment			L		
	17.1.	Exams (r	nid-term exan	ns, exar	m, electronic testing)			70
		Successf	fully implemen	ted lab	/ theoretical exercises			10
	17.2.	Project a	ctivities (oral a	and writ	ten presentation)			10
	17.3.	Other for	ms of studying	g activit	ies			10
18.	Crite	ria for ass	sessment (po	ints /	to 50 points	5(five) (F)		
			rade)		from 51 to 60 points	6(six) (E)		
					from 61 to 70 points	7(seven) ([D)	
					from 71 to 80 points	8(eight) (C)	
					from 81 to 90 points	9(nine) (B)		
					from 91 to 100 points	10(ten) (A)		
19.	Condi	ition for g	etting a signa	ature	60% of term activities o	r minimum 42	points	from
	and ta	aking the	final exam		2 mid-term exams, proje		nd atte	ending
					to lectures and discussi	ons		
20.	_	_	hich classes	are	Macedonian			
	condu				0.16			
21.			itoring the qu	uality	Self-evaluation			
		truction						
22.	Litera							
		·	ory literature					
		Ordinal	Author		Title	Publishe	er	Year
		number	100		D			0005
		1.	Mihal Đurov	ка і	Proizvodnja povrća i	Универзите	•	2005
			dr.		cveća u zaštićenom	Новом Саду		
	22.1.				prostoru	Пољопривр факултет	едни	
		2.	Бранка Лазі	лћ и	Повртарство	Универзите	T V	1998
		۷.	др.	/III	Повртаротво	Новом Саду	•	1330
			Ab.			Пољопривр		
						факултет	од	
		3.				. ,		
		Additiona	al literature					
		Ordinal	Autho	or	Title	Publishe	r	Year
		number						
	22.2.	1.						
		2.						
	l	1	1					
	3.							

App	ppendix No.3 Syllabus for the first, second and third cycle of study									
1.	Cours	e title			Floriculture					
2.	Cours	e code			2ZF112112					
3.	-	progra			Vegetable growing	_				
4.	_		f the study		University "Gocel		•	•		
		-	faculty, institut	e,	Agriculture, Depa	artme	nt for Plant prod	ductio	n	
	group									
5.			y (first, second	d,	First cycle					
	third o	<u> </u>	_			1			1	
6.	Acade	emic ye	ar / semester		Fourth year/	7.	Number of EC	ΓS	4	
					seventh		credits			
	Duefee				semester					
8.	Profes		s for course		Ass. prof. Milan C	eorg	jievski, Ph.D			
9.			s for course		/					
10	enroll			A	مرايات ما الممايات ما		the field of flowing	S14		
10.					cquiring knowledg	ge in	the field of florid	cultur	е.	
11.			e course progr			o (a	oographical on	م اماد	ological)	
				•	in of floral crop	. •	• .		•	
	Decorative features of cultures (stem, leaf flower). 2 and 3. Growing conditions (light, heat, humidity, and soil, water and soil). 4, 5, 6, 7 and 8. Flowering crops on open field									
	(annual, biannual, perennial). 9. Reproduction. 10, 11 and 12. Flower indoors crops									
	(potted species – leaf-decorative, flower – decorative and floral crops for engraved									
	flower	•	es – leal-decolo	alive, i	iowei – decoratio	/e ai	id ilorai crops	101 6	ngraveu	
	,		he exercises:	Practic	al acquiring of th	ne pr	oduction system	ns F	Rotanical	
					n characteristics.	•	•			
			•		produce flower cr	•	, с с. тортовия			
12.					tical and practical		rcises, consulta	tions.	making	
			-		nome; exam prepa				_	
13.			of available tir		120 hours					
14.	Distrik	oution o	of the available	time	2 +1 +1					
				I				T		
15.		of tead	ching	15.1.	Lectures - theo		0		2	
	activit	ies		15.2.	Practice (labora	•	• •		1	
					workshops, outr	each	and			
					teamwork					
16.	Other	forms (of activities	16.1.	Team projects				/	
				16.2.	Individual project	ets			0,5	
					· ,					
	16.3.				Individual study			0,5		
17.	Forms	of ass	essment							
	17.1.	Exams	(mid-term exan	ns, exa	m, electronic testi	ng)			70	
		Succes	ssfully implemen	nted lab	/ theoretical exer	cises	;		10	
	17.2.		•		tten presentation)				10	
	17.3.	-	forms of studying						10	
18.					to 50 points		5(five) (F)			
					1.5 55 points		3(1143)(1)			

	Crite	ria for ass	sessment (points /	fro	m 51 to 60 points	6(six) (E)	6(six) (E)			
			rade)		m 61 to 70 points	7(seven) (D)				
		J	,		m 71 to 80 points	8(eight) (C)				
					m 81 to 90 points	9(nine) (B)				
					m 91 to 100 points	10(ten) (A)				
19.	Cond	ition for a	etting a signature		% of term activities or	` , ` ,	from			
		_	final exam		nid-term exams, proje	•				
	0.000	9		to lectures and discussions						
20.	Langi	uage in wh	nich classes are	Macedonian						
	condu	_								
21.	Metho	od of mon	itoring the quality	Se	elf-evaluation					
	of instruction									
22.	. Literature									
		Compuls	ory literature							
		Ordinal	Author		Title	Publisher	Year			
		number	7 (3.11.10)							
	1. Mihal Đurovka i dr.		Р	roizvodnja povrća I	Univerzitet u	2005				
				veća u zaštićenom	Novom Sadu					
			prostoru		Poljoprivredni					
			•		fakultet					
		2.	Зорка Дренић	Ц	већарство	Завод за	1988			
						уџбенике и				
	22.1.					наставна				
						средства -				
						Београд				
		3.	Стефанка Хаџи	Ц	веќаство на	Универзитет				
			Пецова и	0.	творено (скрипта)	"Св. Кирил и				
			Маргарита			методиј"				
			Димовска			Факултет за				
						земјоделски				
						науки и храна				
						- Скопје				
			al literature				T			
		Ordinal	Author		Title	Publisher	Year			
		number								
		1.	Dole, J.; Willkins		"Floriculture,	Prentice Hall	1999			
	22.2.				Principles and					
			110/0 0 5/05 0		Practice"	Danami D. I	4007			
		2.	LLOYD, C. RICE, G		Garden Flovers	Renguin Books	1997			
				from seed.		London				
						(England)				
		3.								

1.	ppendix No.3 Syllabus for the first, second and third cycle of study												
	Course title			the v	egetable growing								
2.	Course code		2ZF112212										
3.	Study programme:		Vegetable growing										
4.	Organizers of the study		•		ev"- Stip, Faculty of								
	programme (faculty, institu	ıte,	Agriculture, Depa	artme	ent for Plant product	ion							
	group)												
5.	Level of study (first, secor	nd,	First cycle										
	third cycle)												
6.	Academic year / semester		Fourth year/	7.	Number of ECTS	4							
			seventh		credits								
			semester										
8.	Professor		Ass. prof. Milan (Geor	gievski, Ph.D								
9.	Preconditions for course		/										
	enrollment												
10.	Goals of the course prog				·								
	growth, development and fertility, and their agro-technical measures that enable the												
	achievement of high quality and yield as well as the basis for achieving favorable												
	economic effects, but also er	nvironme	ental protection.										
11.	Content of the course prog												
	Content of the lectures: s		•	•	•	•							
	technical measures applied in	•	•	_	. •								
	surface, ridges and furrows,		_										
	(before sawing treating see	d). Spec	cial agro-technica	l me	easures (seedling p	roduction,							
	irrigation, frost protection m	ulching,	protection agains	st hi	gh temperatures ar	irrigation, frost protection mulching, protection against high temperatures and winds).							
	Specific agro-technical meas												
	Specific agro-technical measures that apply only to certain kinds or only in some varieties												
1	in frame type. Vintage packaging and transport. Storing vegetables (dug ditch, overhead												
	in frame type. Vintage packa ditch, warehouse and cold st	ging and	transport. Storin	g ve	getables (dug ditch,	e varieties overhead							
	J	ging and orage). I	d transport. Storin Rank and organiz	g ve	getables (dug ditch,	e varieties overhead							
	ditch, warehouse and cold st	ging and orage). I ted gard	d transport. Storin Rank and organiza en.	g ve	getables (dug ditch, of protected garder	e varieties overhead n. General							
	ditch, warehouse and cold st measures of care in a protec	ging and orage). I ted gard visiting	d transport. Storin Rank and organiza en.	g ve	getables (dug ditch, of protected garder	e varieties overhead n. General							
12.	ditch, warehouse and cold st measures of care in a protec Content of the exercises:	ging and orage). I ted gard visiting	d transport. Storin Rank and organiza en.	g ve	getables (dug ditch, of protected garder	e varieties overhead n. General							
12.	ditch, warehouse and cold st measures of care in a protec Content of the exercises: ransom centres and cold sto	ging and orage). I ted gard visiting rage.	d transport. Storin Rank and organiza en. organizations th	g veation	getables (dug ditch, of protected garder produce vegetables,	e varieties overhead n. General visit the							
12.	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold stonder Methods of study:	ging and orage). I ted gard visiting rage.	d transport. Storin Rank and organiza en. organizations the ercises, consultat	g veration	getables (dug ditch, of protected garder produce vegetables, making independer	e varieties overhead n. General visit the							
12.	ditch, warehouse and cold st measures of care in a protec Content of the exercises: ransom centres and cold stor Methods of study: Lectures, theoretical and practical	ging and orage). It ted gard visiting rage. ctical expreparato	d transport. Storin Rank and organiza en. organizations the ercises, consultat	g veration	getables (dug ditch, of protected garder produce vegetables, making independer	e varieties overhead n. General visit the							
	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold stored Methods of study: Lectures, theoretical and prawork; learning home; exam process.	ging and orage). It ted gard visiting rage. ctical expreparate ime	d transport. Storin Rank and organization. organizations the ercises, consultatory classes and m	g veration	getables (dug ditch, of protected garder produce vegetables, making independer	e varieties overhead n. General visit the							
13.	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold storm Methods of study: Lectures, theoretical and prawork; learning home; exam protal amount of available to	ging and orage). It ted gard visiting rage. ctical expreparate ime	d transport. Storin Rank and organizations the organizations the ercises, consultatory classes and manager 120 hours	g veration	getables (dug ditch, of protected garder produce vegetables, making independer tests.	e varieties overhead n. General visit the							
13. 14.	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold storm Methods of study: Lectures, theoretical and prawork; learning home; exam protal amount of available to Distribution of the available.	ging and orage). It ted gard visiting rage. ctical expreparate ime time	transport. Storin Rank and organizations the organizations the ercises, consultatory classes and managed to the ercises and ercises are ercises are ercises and ercises are ercises and ercises are ercises and ercises are ercises are ercises are ercises are ercises and ercises are ercises and ercises are er	g veration nat prices	getables (dug ditch, of protected garder produce vegetables, making independer tests.	e varieties overhead n. General visit the nt seminar							
13. 14.	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold storms of study: Lectures, theoretical and prawork; learning home; exam protal amount of available to Distribution of the available forms of teaching	ging and orage). It ted gard visiting rage. ctical expreparate ime time	transport. Storin Rank and organizations the organizations the ercises, consultatory classes and management of the ercises and ercises are ercises and ercises and ercises and ercises are ercis	g veration nat prices ions, iid-ter reticatory,	getables (dug ditch, of protected garder produce vegetables, making independer making independer tests.	e varieties overhead n. General , visit the nt seminar							
13. 14.	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold storms of study: Lectures, theoretical and prawork; learning home; exam protal amount of available to Distribution of the available forms of teaching	ging and orage). It ted gard visiting rage. ctical expreparate ime time	d transport. Storin Rank and organizations the organizations the ercises, consultate ory classes and me 120 hours 2 +1 +1 Lectures - theo Practice (labora	g veration nat prices ions, iid-ter reticatory,	getables (dug ditch, of protected garder produce vegetables, making independer making independer tests.	e varieties overhead n. General , visit the nt seminar							
13. 14.	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold storms of study: Lectures, theoretical and prawork; learning home; exam protal amount of available to Distribution of the available forms of teaching	ging and orage). It ted gard visiting rage. ctical expreparate ime time	d transport. Storin Rank and organizations the organizations the ercises, consultate ory classes and me 120 hours 2 +1 +1 Lectures - theo Practice (laboral workshops, outr	g veration nat prices ions, iid-ter reticatory,	getables (dug ditch, of protected garder produce vegetables, making independer making independer tests.	e varieties overhead n. General , visit the nt seminar							
13. 14. 15.	ditch, warehouse and cold standards of care in a protect Content of the exercises: ransom centres and cold stonder Methods of study: Lectures, theoretical and prawork; learning home; exam protection of the available to Distribution of the available forms of teaching activities	ging and orage). It ted gard visiting rage. Ctical expreparate ime time 15.1.	transport. Storin Rank and organizations the organization of the o	g veration hat prices ions, hid-te	getables (dug ditch, of protected garder produce vegetables, making independer making independer tests.	e varieties overhead n. General visit the nt seminar							

17.	Forms	s of asses	sment						
	17.1.	Exams (r	mid-term exams, exa	m, electronic testing)		70			
		Successf	fully implemented lab	/ theoretical exercises		10			
	17.2.	Project a	ctivities (oral and wri	tten presentation)		10			
	17.3.	Other for	ms of studying activit	ties		10			
18.	Crite	ria for ass	sessment (points /	to 50 points	5(five) (F)				
			rade)	from 51 to 60 points	6(six) (E)				
				from 61 to 70 points	7(seven) (D)				
				from 71 to 80 points	8(eight) (C)				
				from 81 to 90 points	9(nine) (B)				
				from 91 to 100 points	10(ten) (A)				
19.	Condi	tion for g	etting a signature	60% of term activities of	or minimum 42 points	from			
	and ta	king the	final exam	2 mid-term exams, proj		ending			
				to lectures and discuss	ions				
20.	Langu condu		hich classes are	Macedonian					
21.			itoring the quality	Self-evaluation					
		truction	g qua,	Son Standard					
22.	Litera	ture		<u> </u>					
		Compuls	ory literature						
		Ordinal	Author	Title	Publisher	Year			
		number	7.00.000						
		1.	Mihal Đurovka i	Proizvodnja povrća I	Univerzitet u	2005			
			dr.	cveća u zaštićenom	Novom Sadu				
	22.1.			prostoru	Poljoprivredni				
					fakultet				
		2.	Бранка Лазић и	Повртарство	Универзитет у	1998			
			др.		Новом Саду				
					Пољопривредни				
					факултет				
		Additions	 al literature						
				T:4lo	Publisher	Vaar			
		Ordinal number	Author	Title	Publisher	Year			
	22.2.	1.							
		2.							
		3.							

1		ppendix No.3 Syllabus for the first, second and third cycle of study									
1.	Course title		Vegetable proces	ssing	1						
2.	Course code		2ZF120612								
3.	Study programme:		Vegetable growin	ıg –	Four year study						
4.	Organizers of the study		University "Gocel	Delc	ev"- Stip, Faculty of						
	programme (faculty, institut	e,	Agriculture, Depa	artme	ent for Plant producti	on					
	group)										
5.	Level of study (first, second third cycle)	i,	First cycle								
6.	Academic year / semester		Fourth year/	7.	Number of ECTS	4					
			eight semester		credits						
8.	Professor		Ass. prof. Milan C	Geor	gievski, Ph.D	'					
9.	Preconditions for course		/								
	enrollment										
10.	0. Goals of the course programme: Students are introduced with the latest technological										
	procedures for processing and	d cannir	ng vegetables.								
11.	Content of the course progr	amme:									
	Content of the lectures Op	ening i	ntroduction to te	achii	ng discipline. Proce	sses that					
	occur after harvest (breathing evaporative, maturation and over maturation. Darkening of										
	the fruits and their processing (ferment, no ferment and microbiological). Aids and										
	resources (water, means of acidification, means of strengthening and spices).										
	Preparatory works for canning				•	. ,					
	blanching, blending, clarificati					•					
			•		` •	•					
	Principles of conservation	-									
	vegetables (tomato juice conce	•	•		• •	n beans),					
	marinade, biologically canned	_			-						
	Content of the exercises		•			•					
	Determination of total soluble s		•		•						
			ellulose, starch, ferments, salt, hardness and alkalinity								
	of the water. Making a yield	of finis	hed products. Vi	siting	g organizations for	vegetable					
	processing.										
12.	Methods of study: Lectures,	theore	tical and practica	l exe	ercises, consultation	s, making					
	independent seminar work; lea		ome; exam prepa	arato	ry classes and mid-t	erm tests.					
13.	Total amount of available tir	ne	120 hours								
14.	Distribution of the available	time	2 +1 +1								
15.	Forms of teaching	15.1.	Lectures - theo	retic	al training	2					
10.	activities	15.1.	Practice (labora		•	1					
	activities	10.4.	workshops, outr	•	• 7 .	'					
			teamwork	caci	i ailu						
16.	Other forms of activities	16.1.				1					
10.	Other forms of activities	10.1.	Team projects			/					
		16.2.	Individual projec	cts		0,5					
		16.3.	Individual study			0,5					
17.	Forms of assessment		•		ı						

	17.1.	Exams (r	nid-term exams, exa	m, electronic testing)		70			
		Successf	ully implemented lab	/ theoretical exercises		10			
	17.2.	Project a	ctivities (oral and wri	tten presentation)		10			
	17.3.	Other for	ms of studying activit	ties		10			
18.	Crite	ria for ass	sessment (points /	to 50 points	5(five) (F)				
		gı	rade)	from 51 to 60 points	6(six) (E)				
				from 61 to 70 points	7(seven) (D)				
				from 71 to 80 points	8(eight) (C)				
				from 81 to 90 points	9(nine) (B)				
				from 91 to 100 points	10(ten) (A)				
19.		_	etting a signature	60% of term activities or	•				
	and ta	king the f	final exam	2 mid-term exams, proje		tending			
				to lectures and discussion	ns				
20.	_	_	nich classes are	Macedonian					
	condu								
21.			itoring the quality	Self-evaluation					
		truction							
22.	Litera								
		Compuls	ory literature						
		Ordinal	Author	Title	Publisher	Year			
		number							
		1.	В. Црнчевиќ	Преработка на овошје	Скопје	1977			
	22.1.			и зеленчук					
		2.	В. Црнчевиќ	Теоријске основе	Београд	1973			
				конзервирање воча и					
		-		поврћа.		1000			
		3.	Љубисављевић	Воће, поврће, пећурке	Београд	1989			
		A dditions	l al literature	и прераЂевине					
				T:0	D 1 11 1	1.77			
		Ordinal	Author	Title	Publisher	Year			
	22.2.	number 1.							
		2.							
		3.							

1.	endix No.3 Syllabus	s for th	e first, second a	ınd t	hird cycle of study	,			
1.	Course title		Biotechnology a	and I	oiosafety				
2.	Course code		2ZF111912						
3.	Study programme:		Gardening, 4 yea	ar stu	dy programme				
4.	Organizers of the study		University "Goce	Delc	ev"- Stip.				
	programme (faculty, institute,		Faculty of Agricu	lture					
	group)								
5.	Level of study (first, second, t	third	First cycle						
	cycle)								
6.	Academic year / semester		Fourth/seven	7.	Number of ECTS	6			
			2012/13		credits				
8.	Professor		Prof. Liljana Kole	va G	iudeva, Ph.D				
9.	Preconditions for course		No						
	enrollment								
10.	Goals of the course programm			_					
	Biotechnology and biosafety I								
	methods invitro conditions. Th								
	practical knowledge about the	-	-						
4.4	and the application of methods of plantcells and tissues cultures at invitro conditions.								
11.	Content of the course program								
	Theoretical part of the coursecontent: 1. Introduction. Agricultural biotechnology 2. Environmental aspects of biotechnology 3.								
	<u> </u>		••		•	• • •			
	Biodiversity-concept, importan		•	•	•	· ·			
	meaning and stages of microp				•				
	getting haploids and dihaploids 9.Protoplasts 10.Genetic transformations 11.Genebanks								
	12.Importance and power of agricultural biotechnology								
		gricultu	ıral biotechnology			enebanks			
	Contents of exercises (prac	ıgricultu tical ar	ral biotechnology nd laboratory):	,					
	Contents of exercises (practile 1. Laboratory for plant biotech	igricultu tical ar hnology	iral biotechnology nd laboratory): / - equipment and	, d spa	ace 2. Sterilization e	equipment			
	Contents of exercises (praction 1. Laboratory for plant biotect operation and plant material 3	igricultu tical ar hnology . Prepa	ral biotechnology nd laboratory): / - equipment and ration of nutrient s	, d spa solut	ace 2. Sterilization eions and growth reg	equipment ulators. 4.			
	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium	igricultu tical ar hnology . Prepa n 5. Incu	ral biotechnology of laboratory): - equipment and ration of nutrient substion a seeds of	, d spa solut n bas	ace 2. Sterilization elements and growth regular medium 6.Isolation	equipment ulators. 4. on of initial			
	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8	igricultu tical ar hnology . Prepa n 5. Incu	ral biotechnology of laboratory): - equipment and ration of nutrient substion a seeds of	, d spa solut n bas	ace 2. Sterilization elements and growth regular medium 6.Isolation	equipment ulators. 4. on of initial			
12.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium	igricultu tical ar hnology . Prepa n 5. Incu	ral biotechnology of laboratory): - equipment and ration of nutrient substion a seeds of	, d spa solut n bas	ace 2. Sterilization elements and growth regular medium 6.Isolation	equipment ulators. 4. on of initial			
12.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs.	igricultu tical ar hnology . Prepa n 5. Incu 3.Microp	ural biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds of propagation 9 - 1	d spa solut n bas 2. In	ace 2. Sterilization eions and growth reg sal medium 6.Isolatio vitro cultures of pla	equipment ulators. 4. on of initial nt tissues			
12. 13.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study:	ngricultu tical ar hnology . Prepa n 5. Incu 3.Microp	ural biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds of propagation 9 - 1	d spa solut n bas 2. In	ace 2. Sterilization eions and growth reg sal medium 6.Isolatio vitro cultures of pla	equipment ulators. 4. on of initial nt tissues			
	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise	igricultu tical ar hnology . Prepa n 5. Incu 3.Microp s, e-lea	ural biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1	d spa solut n bas 2. In	ace 2. Sterilization eions and growth reg sal medium 6.Isolatio vitro cultures of pla	equipment ulators. 4. on of initial nt tissues			
13.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time	igricultu tical ar hnology . Prepa n 5. Incu 3.Microp s, e-lea	ural biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1 arning, individual a	d spa solut n bas 2. In	ace 2. Sterilization elions and growth reg sal medium 6.Isolation vitro cultures of pla eam projects, consu	equipment ulators. 4. on of initial nt tissues			
13. 14.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available time	egricultu tical ar hnology . Prepa n 5. Incu 3.Microp s, e-lea	ural biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1 arning, individual a 156 hours 2 +2 +1	d spa solut n bas 2. In and t	ace 2. Sterilization eions and growth regisal medium 6.Isolation vitro cultures of place eam projects, consulations at training	equipment ulators. 4. on of initial nt tissues ultations.			
13. 14.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available time	igricultu tical ar hnology . Prepa n 5. Incu 3.Microp s, e-lea	ural biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1 arning, individual a 156 hours 2 +2 +1 Lectures - theo	d spa solut n bas 2. In and t	ace 2. Sterilization elions and growth regions and growth region 6. Isolatic vitro cultures of place eam projects, consular training auditory),	equipment ulators. 4. on of initial nt tissues ultations.			
13. 14.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available time	igricultu tical ar hnology . Prepa n 5. Incu 3.Microp s, e-lea	ural biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1 arning, individual a 156 hours 2 +2 +1 Lectures - theo Practice (labora	d spa solut n bas 2. In and t	ace 2. Sterilization elions and growth regions and growth region 6. Isolatic vitro cultures of place eam projects, consular training auditory),	equipment ulators. 4. on of initial nt tissues ultations.			
13. 14.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available time	igricultu tical ar hnology . Prepa n 5. Incu 3.Microp s, e-lea	ral biotechnology nd laboratory): 7 - equipment and ration of nutrient subation a seeds of propagation 9 - 1 arning, individual a 156 hours 2 +2 +1 Lectures - theo Practice (labora workshops, outr teamwork Team projects	d spa solut n bas 2. In and to reticatory, reach	ace 2. Sterilization elions and growth regions and growth region 6. Isolatic vitro cultures of place eam projects, consular training auditory),	equipment ulators. 4. on of initial nt tissues ultations.			
13. 14. 15.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available tim Forms of teaching activities	s, e-lease 15.1. 16.2.	ral biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1 arning, individual a 156 hours 2 +2 +1 Lectures - theo Practice (labora workshops, outr teamwork Team projects Individual projects	d spa solut n bas 2. In and t retica tory, reach	ace 2. Sterilization elions and growth regions and growth region 6. Isolatic vitro cultures of place eam projects, consular training auditory),	equipment ulators. 4. on of initial nt tissues ultations.			
13. 14. 15.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available time Forms of teaching activities Other forms of activities	gricultu tical ar hnology . Prepa n 5. Incu 3.Microp s, e-lea ne 15.1. 15.2.	ral biotechnology nd laboratory): 7 - equipment and ration of nutrient subation a seeds of propagation 9 - 1 arning, individual a 156 hours 2 +2 +1 Lectures - theo Practice (labora workshops, outr teamwork Team projects	d spa solut n bas 2. In and t retica tory, reach	ace 2. Sterilization elions and growth regions and growth region 6. Isolatic vitro cultures of place eam projects, consular training auditory),	equipment ulators. 4. on of initial nt tissues ultations.			
13. 14. 15.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available time Forms of teaching activities Other forms of assessment	s, e-lease 15.1. 16.2. 16.3.	ral biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1 arning, individual a 156 hours 2 +2 +1 Lectures - theo Practice (labora workshops, outr teamwork Team projects Individual project Individual study	d spassoluten bas 2. In and tereticatory, reach	ace 2. Sterilization elions and growth regions and growth region for the contract of the contr	equipment ulators. 4. on of initial nt tissues ultations.			
13. 14. 15.	Contents of exercises (pract 1. Laboratory for plant biotech operation and plant material 3 Preparation of nutrient medium explants7. Meristem culture 8 and organs. Methods of study: Lectures, Laboratory exercise Total amount of available time Distribution of the available time Forms of teaching activities Other forms of activities	s, e-lease 15.1. 16.2. 16.3.	ral biotechnology nd laboratory): / - equipment and ration of nutrient subation a seeds or propagation 9 - 1 arning, individual a 156 hours 2 +2 +1 Lectures - theo Practice (labora workshops, outr teamwork Team projects Individual project Individual study	d spassoluten bas 2. In and tereticatory, reach	ace 2. Sterilization elions and growth regions and growth region for the contract of the contr	equipment ulators. 4. on of initial nt tissues ultations.			

	17.3.	Other for	ms of studying activit	ties			20			
18.	Crite	eria for ass	sessment (points /	to	50 points	5(five) (F)				
		g	rade)	fro	om 51 to 60 points	6(six) (E)				
				fro	om 61 to 70 points	7(seven) (D)				
				fro	om 71 to 80 points	8(eight) (C)				
				fro	om 81 to 90 points	9(nine) (B)				
				from 91 to 100 points 10(ten) (A)						
19.	Condi	tion for ge	tting a signature	60	% of term activities or	minimum 42 point	s from			
	and ta	king the fi	nal exam		mid-term exams, proje		tending			
					lectures and discussion	ons				
20.	_	•	ich classes are	M	acedonian					
	condu	conducted								
21.		Method of monitoring the quality of			elf-evaluation					
	instruc	ruction								
22.	Literature									
		Compuls	ory literature							
		Ordinal	Author		Title	Publisher	Year			
		number								
	22.1.	1.	George E.F.	Р	Plant Propagation by	Edingtin Wilts,	1996			
	22.1.			ti	ssue culture	England				
		2.	Liljana Koleva	P	Plant Phisiology	UGD Stip	2012			
			Gudeva							
		3.								
		Additiona	al literature			•	•			
		Ordinal	Author		Title	Publisher	Year			
		number								
	00.0	1.	Bruss Alberst, at all	l.	Molecular Biology	Garland	2002			
	22.2.				of the cell	Science, NY				
						USA				
		2.								
		3.								
<u> </u>										

App	endix No.3	Syllabus for t	he first, second a	nd t	hird cycle of study		
1.	Course tit	le	Plant protection in vegetable growing				
2.	Course co	ode	2ZF100312				
3.	Study pro	gramme:	Vegetable growing	ng –	Four year study		
4.	Organizer	s of the study	University "Gocel	Delc	ev"- Stip, Faculty of		
	programm	ne (faculty, institute,	Agriculture, Department for Plant production				
	group)						
5.	Level of st	tudy (first, second,	First cycle				
	third cycle	?)					
6.	Academic	year / semester	Fourth year/	7.	Number of ECTS	8	
			seventh		credits		
			semester				

8.	Professor		Ass. prof. Ph.D Dusan Sp	asov					
9.	Preconditions for course		/						
	enrollment								
10.	Goals of the course program	nme: A	im of this course is to ena	ble students	to familiarize				
	with the most important diseas	ses, pes	sts and weeds in vegetabl	e crops and	their				
	suppression.		-						
11.	Content of the course progr	amme:							
	Content of the lectures: 1. In	troducti	on to the most important d	iseases, pes	ts and weeds				
	in vegetable crops. 2. Protect	ion sys	tems in vegetables. 3. Dis	seases of ve	getables that				
	are transmitted by seed and t	heir era	dication. 4. Polyphagous	pests of veg	etable crops.				
	5. Potato protection against								
	vegetables against diseases,	-		-	•				
	diseases, pests and weeds. 8. Leafy vegetables protection against diseases, pests and								
	weeds. 9. Protection of the leguminous vegetable crops from diseases, pests and weeds. 10. Protection of the bulbous vegetables against diseases, pests and weeds. 11.								
		•	•	•					
	Protection of the root vegetal	•	· •		Protection of				
	vegetables grown in greenhouses from diseases, pests and weeds. Content of the exercises: 1. Selection of products and methods of application of plant								
	protection products. 2. Disease symptoms in vegetables that are transmitted by seed and								
	their eradication. 3. Means for treating seed. 4. Determination of the polyphagous pests								
	of vegetable crops. 5. Key to the identification of diseases and pests of potatoes. 6. Key								
	for identification of diseases a				•				
	diseases and pests of cabbag	-		•					
	and pests of leafy vegetable	s. 9. K	ey for the identification of	of diseases	and pests of				
	leguminous vegetables. 10. K	ey to id	lentifying diseases and pe	sts of bulbo	us vegetable.				
	11. Key to identifying diseases	-	· ·	•	for protection				
	vegetables from diseases, per	sts and	weeds grown in greenhou	ises.					
12.	Methods of study:								
	Lectures, theoretical and prac			•	dent seminar				
40	work; learning home; exam pr			ests.					
13.	Total amount of available tir Distribution of the available		180 hours						
14. 15.	Forms of teaching		2+2+1	ining	2				
15.	activities	15.1. 15.2.	Lectures - theoretical tra Practice (laboratory, aud		2				
	activities	15.2.	workshops, outreach and	• •	2				
			teamwork	ı					
16.	Other forms of activities	16.1.	Team projects		/				
10.					,				
		16.2.	Individual projects		1				
		16.3.	Individual study		/				
	10.5. Marviada stady								
17.									
	17.1. Exams (mid-term exams, exam, electronic testing) 70								
	17.2. Project activities (oral a	and writ	written presentation) 10						
	17.3. Other forms of studying activities 20								
18.	Criteria for assessment (points / to 50 points 5(five) (F)								
	grade)		from 51 to 60 points	6(six) (E)					

				fro	m 61 to 70 points	7(seven) (D)			
					m 71 to 80 points	8(eight) (C)			
			_		m 81 to 90 points	9(nine) (B)			
			-		m 91 to 100 points	10(ten) (A)			
19.	Condi	ition for a	etting a signature		0% of term activities o	, , , ,	ts		
		_	final exam	from 2 mid-term exams, project activities and					
		J		attending to lectures and discussions					
20.	Langu	age in wh	nich classes are		acedonian				
	condu	conducted							
21.	Method of monitoring the quality			Se	lf-evaluation				
		truction							
22.	Literature								
		Compuls	ory literature						
		Ordinal	Author		Title	Publisher	Year		
		number							
		1.	Доц. Д-р Душан	3	аштита на	УГД-Штип	2010		
			Спасов		радинарски култури –				
	22.1.	22.1. Асс. М-р Билјана		И	нтерна скрипта				
			Атанасова	ļ.,		\ <u></u>	0010		
		2.	Доц. Д-р Душан		нтерен практикум по	УГД-Штип	2010		
			Спасов	Заштита на					
			Асс. М-р Билјана Атанасова	градинарски култури					
		3.	Атанасова						
			 al literature						
					T:41 a	Dublish sa	Vasa		
		Ordinal number	Author		Title	Publisher	Year		
		1.	M. Maceljski, B.		Štetočinje povrća –	Zrinski Čakovec	2004		
		1.	Cvjetković, Z. Ostoji	ć	s opsežnim	ZIIIISKI CAKUVEC	2004		
			J. Igrc Barčić, N.	С,	prikazom zaštite				
			Pagliarini, Lj, Oštrec	:_	povrća od štetnika,				
			K. Barić, I. Čizmić	,	uzročnika bolesti i				
	22.2.		,		korova				
		2.	Prof. dr. Milan		Priručnik iz zaštite	Zavod za zaštitu	1997		
		Maceljski, Prof. dr.			bilja	bilja u			
			Bogdan Cvjetković,			poljoprivredi i			
			Prof.dr. Jasminka Ig	rc		šumarstvu			
			Barčić, Prof. dr.			Republike			
			Zvonimir Ostojić			Hrvatske			
		3.							

Appe	endix No.3 Syll	abus for t	the first, second	and	third cycle of s	tudy		
1.	Course title		Quality Manager	men	t			
2.	Course code		2MF103712					
3.	Study programme:		QUALITY CONT	ROL	i.			
4.	Organizers of the study		University "Goce	Delo	ev"- Stip,			
	programme (faculty, instit	ute,	Faculty of Agricul	lture				
	group)							
5.	Level of study (first, second	ond,	First cycle					
	third cycle)			1				
6.	Academic year / semeste	r	Fourth year /	7.	Number of ECT	S	4	
			VIII semester credits					
8.	Professor		Prof. Sasa Mitrev	v, Pł	n.D			
9.	Preconditions for course		No					
	enrollment							
10.	, , ,							
	Customer loyalty. Creati	•	•	aniza	ations. Role, imp	orta	nce and	
	implementation of the ISC		ily of standards					
11.	Content of the course pro	•						
	1. Introduction to quali	•					•	
	organizations for competitiveness). 2. Quality management system (general							
	requirements relating to the ISO9001:2008 Quality Management System). 3. Management responsibility (item 5 of the standard ISO 9001:2008). 4. Resource							
		• `			•			
	management (item 6 of the		,		•	•	-	
	7.2 and 7.3 of the standa		•			•		
	7.4, 7.5 and 7.6 of the		•			•		
	improvement (item 8 of the		•					
	competence of testing Information Security N		ent Systems. 1)27001,)14001,	
	Environmental Manageme	•	•				,	
	management. 12. Introdu		•				•	
12.	Methods of study: lesson		0 22000 1 000 08	пСту	wanagement Sy	Steri	1.	
13.	Total amount of available		120 hours					
14.	Distribution of the availab		2+1+1					
17.	Distribution of the availab	ic time	21111					
15.	Forms of teaching	15.1.	Lectures - theorem	retic	al training		2	
	activities	15.2.	Practice (laborate	tory,	auditory),		1	
			workshops, outr	each	and			
			teamwork					
16.	Other forms of activities	16.1.	Team projects					
		40.0	ا مانینا ما د د د ا					
		16.2.	Individual projec	is			1	
		16.3	Individual study					
			<u> </u>					
17.	Forms of assessment							
	17. Exams (mid-term ex	kams, exa	m, electronic testi	ng)			70	
	1							

	17. 2	Project ac	ctivities (oral and wri	tten presentation)		10	
	17. 3	Other form	ns of studying activi	ties		20	
18.			sessment (points /	to 50 points			
		g	rade)	from 51 to 60 points	6(six) (E)		
				from 61 to 70 points	7(seven) (D)		
				from 71 to 80 points	8(eight) (C)		
				from 81 to 90 points	9(nine) (B)		
				from 91 to 100 points	10(ten) (A)		
19.	Cond	dition for ge	etting a signature	/ 60% of term activities or	•		
	and t	aking the f	final exam	from 2 mid-term exams, p	project activities ar	nd	
				attending to lectures and	discussions		
20.	Lang	uage in wh	nich classes are	Macedonian			
		ucted					
21.	Meth	od of mon	itoring the quality	Self-evaluation			
	of ins	struction					
22.	Literat						
		Compuls	ory literature				
		Ordinal number	Author	Title	Publisher	Year	
		1.	Institute of	Quality	IARM		
			accreditation of	managementsystems-			
			Republic of	Requirements(ISOEN			
			Macedonia	ISO 9001:2008)			
	22.1.	2.	Hrvoje Skoko	Quality management	Sinergija, Zagreb, Croatia	2000	
		3.	David Hoyle	Quality Systems	Butterworth-	2001	
				Handbook (4 th edition)	Heinemann, A		
					member of the		
					Reed Elsevier		
					plc group		
					<u> </u>		
		Additiona	ı al literature	1			
		Ordinal	Author	Title	Publisher	Year	
		number					
	00.0	1.	Institute of	ISO 17025, ISO 27001,	IARM	2010	
	22.2.		accreditation of	ISO 14001, ISO			
			Republic of	22000, ISO 18001			
			Macedonia	,			
		2.					

App	endix No.3 Syllal	ous for	the first, second a	and th	nird cycle of study				
1.	Course title		Farm Management						
2.	Course code		2ZF102512						
3.	Study programme:		Agromanagement,	4 yea	r study programme				
4.	Organizers of the study		University "GoceDelcev"- Stip. Faculty of						
	programme (faculty, institute,		agriculture - Stip						
	group)								
5.	Level of study (first, second,	third	First cycle						
	cycle)								
6.	Academic year / semester		IV year/ VIII	7.	Number of ECTS	4			
			semester		credits				
8.	Professor		assi. Prof. Elenica	Sofija	nova, Ph.D				
9.	Preconditions for course		/						
	enrollment								
10.	Goals of the course programm	ne: The	course aims is to p	resen	t students with intro	ductory			
	observations on the importar		•	_	•				
	planning, job analysis, recruitment, selection, training and development, as well as								
	measuring the performance of	f manag	gement by developi	ng ba	sic management sk	ills.			
11.	Content of the course prograr								
	A) Contents of lectures: 1. Farm management in the twenty-first century; 2. Measuring								
	the performance of managem				•	-			
	Whole farm planning, cash t	flow bu	dget 5. Farm busi	ness	organization and y	ield; 6.			
	Dealing with risk and uncertai	nty, inve	estment analysis; 7	. Obta	aining resources for	capital			
	management and use of cr	edits; 8	Control and use	e of l	land; 9. Human re	source			
	management and planning o								
	capacity 11. Rules and reg	ulations	for agricultural la	bour;	12. Management	of self			
	development, SWOT-analysis	3.							
	B) Contents of exercises: 1		•		•				
	comparative analysis; 3. Stud	•	•		0.				
	and capital investment evalua		•		•	•			
	mechanization; 6. Sources of		•						
	practice examples; 8. Marketin		•						
	Agricultural marketing organ	izations	s; 11. Cereal mar	kets-e	examples; 12. Live	stock			
	markets, examples;								
12.	Methods of study:								
	Lectures, theoretical and prac				•	eminar			
4.0	work; learning home; exam pr		•	-term	tests: consultation.				
13.	Total amount of available time		120 hours						
14.	Distribution of the available tir		2 +1 +1		.,				
15.	Forms of teaching activities	15.1.	Lectures - theore		•	2			
		15.2.	Practice (laborato			1			
			workshops, outrea	ach ar	nd				
1			teamwork						
16.	Other forms of activities	16.1.	Team projects			0.5			
		16.2	Individual projects	<u> </u>		0.5			
		10.2.	individual projecte	16.2. Individual projects					
						0.5			

17.	Forms	Forms of assessment								
	17.1.	Exams (r	nid-term exams, exan	n, electronic testing)		70				
	17.2.	Project a	ctivities (oral and writt	en presentation)		10				
	17.3.	Other for	ms of studying activiti	es		20				
18.	Crite	eria for ass	sessment (points /	to 50 points	5(five) (F)					
		g	rade)	from 51 to 60 points	6(six) (E)					
				from 61 to 70 points	7(seven) (D)					
				from 71 to 80 points	8(eight) (C)					
				from 81 to 90 points	9(nine) (B)					
				from 91 to 100 points	10(ten) (A)					
19.	Condi	Condition for getting a signature		/ 60% of term activities	or minimum 42 poin	ts from				
	and ta	king the fi	nal exam	2 mid-term exams, pro		ending				
				to lectures and discuss	ions					
20.	_	-	ch classes are	Macedonian						
	condu									
21.			oring the quality of	Self-evaluation, periodic tests for students,						
	instruc			questionnaires						
22.	Literat	,								
		Compuls	ory literature							
		Ordinal	Author	Title	Publisher	Year				
		number								
		1.	Donald D. Kay,	Farm Management (V		2009				
			William M.Edvards,	edition)	CenterTRI					
	22.1.		Ratricia A. Daffy	A I' I 🗖	Dealt Balaine					
	22.1.	2.	Jonathan Turner,	Applied Farm	Publishing	2010				
			MartinTaylor	Management (Second Edition)	I CenterTRI	2010				
		3.	Gareth Jones,	Modern Management	ISPPI, Skopje	2009				
		J.	Jennifer George	Wodern Wanagement	ізгті, экорје	2009				
			Jerinier George							
		Additiona	al literature							
		Ordinal	Author	Title	Publisher	Year				
		number								
	22.2.	1.	Biljana Bogičevik	Human Resource	Belgrade	2004				
				Management						
		2.	Lioyd Byars, Leslie	Human Resource	McGraw-Hill	2006				
			Rue	Management						

UNIVERSITY ELECTIVE COURSES - Fourth year of study

App	endix No.3	Syllabus for	the first, second and third cycle of study		
1.	Title of the 0	Course	Fundamentals of Tourism		
2.	Code		UGD102212		
3.	Study Programme		Tourism		

4.	Organizer of the study	Un	iversi	ty Goce D)elcev	/-Stip				
''	programme (unit or institut			•		Business	Logistics	:		
	Faculty, department)	-	•	nent of Ge						
5.	Cycle (first, second and thi		st cyc		719011					
J.	cycle)		or cyc							
6.	Academic year / semester	1/1			7.	Number	· of	8		
0.	Academic year / Semester	' ' '			/ -	credits	Oi			
8.	Professor (s)	71	latko	Jakovlev	DhD	Credits		<u> </u>		
9.	Preconditions for course			l in first ye		ıdioc				
9.	enrollment	=	ronec	ı iii iii Si ye	ai Sii	uules				
10.	Goals of the course programme: The objectives are scientific and practical, scientific									
.0.	refers to the acquisition of theoretical knowledge of students about the basics of									
	tourism, and the practical app			•						
11.	Content of the course prog				noug	3 117 1170 110	opitality p	71401100.		
	Theoretical and method				e stud	v of touris	m(subjec	t tasks.		
	goals and methods of	•			<i>-</i> 0.000	<i>y</i> 0. (0 a0	(00.0)00	ι, ιασπο,		
	Aspects of the scientific study of tourism									
	Theoretical understanding of the concept of tourism									
	4. Practical importance of defining tourism									
	5. Tourism and analog appear6. Socio-economic conditionality tourism									
	7. Theoretical views on the emergence of tourism									
	8. Tourist need									
	9. Factors of tourism									
	Tourism functions									
	11. Tourism values									
	12. Tourist destination	0-10								
	13. Tourist attractions and14. Types of tourism	activities								
	15. Tourist regulation									
	16. Tourist differential									
	17. Tourist futurology									
12.	Methods of study:: Lectures	s, tutorials	and	laboratory	/ exe	cises				
13.	Total available time			216 houi						
14.	Distribution of available time	ne		3 + 2 + 2						
15.	Forms of teaching /	15.1.	lec	tures / th	eoret	ical -	3 hc	ours		
	learning activities			ntact teac	hing	,				
				eaching						
		15.2.		oretical a	and p	ractical	2 hc	ours		
				ercises,						
				xams, pr	•					
				ependen	t sem	inar				
			wo							
16.	Other forms of activities	16.1.		ject task			1 hc	ours		
		16.2.	Ind	ividual ta	ısks		1 ho	ours		
		16.3.	Но	me learni	ng		1 hc	ours		
17.	Forms of assessment		•							

	17.1.	Tests / oral exams			0-20	points	
	17.2.	Seminars (paper / project - and/or oral)	presentation: written		10	points	
	17.3.	Activity and participation		20	points		
18.	Criteria for assessment up 50 points				(five)	(F)	
	(point	s/grade)	51 to 60 points	6	(six)	(E)	
			61 to 70 points	7	(seven)	(D)	
			71 to 80 points	8	(eight)	(C)	
			81 to 90 points	9	(nine)	(B)	
			91 to 100 points	10	(ten)	(A)	
19.	Condi	ition for getting a signature	60% success from all a	activities before exam i.e			
	and ta	aking the final exam	42 points from two m	nid-teri	m tests, se	eminar	
			attendance of lectures a	and ex	ercises		
20.	Langu	uage in which classes are	Macedonian language				
	condu	ucted					
21.		od of monitoring the quality	Self-evaluation				
	of tea	ching					

endix No.3	Subject p	programme from	first	cycle studies			
Course title		BIOLOGY					
Course code	Э	UGD102512					
Study progra	amme:	University elective	ve sı	ubject			
•	•	, ,					
group)	(faculty, institute,	Department of P	'lant	Protection			
Level of stud	dy (first, second, third	First cycle					
Academic y	ear / semester	Second / forth Third / sixth	7.	Number of ECTS credits	6		
Professor		Ass. prof. Liljana	a Kol	eva Gudeva	<u>.l.</u>		
Precondition enrollment	ns for course	No					
Goals of the course programme: Gaining fundamental knowledge in biology which is necessary for understanding of life and life processes. Gaining of wide knowledge about the living organisms, cell structure, biological systems, as well as understanding of reproduction. Development of proper attitude to the each own health and health of other humans. Understanding of principles of inheritance. Implementation of gained knowledge. Content of the course programme:							
0,	0 0						
	Course title Course code Study progra Organizers of programme group) Level of study cycle) Academic years Professor Precondition enrollment Goals of the necessary of about the live of reproduct other human knowledge. Content of 1. Biology a	Course title Course code Study programme: Organizers of the study programme (faculty, institute, group) Level of study (first, second, third cycle) Academic year / semester Professor Preconditions for course enrollment Goals of the course programme: Genecessary for understanding of lift about the living organisms, cell structure of reproduction. Development of prother humans. Understanding of pknowledge. Content of the course programme. 1. Biology as science of living organisms	Course title Course code Study programme: Organizers of the study programme (faculty, institute, group) Level of study (first, second, third cycle) Academic year / semester Preconditions for course enrollment Goals of the course programme: Gaining fundament necessary for understanding of life and life proces about the living organisms, cell structure, biological s of reproduction. Development of proper attitude to the other humans. Understanding of principles of inhericknowledge.	Course title Course code Study programme: University elective su Department of Plant Department of Plant University elective su Department of Plant Department of Plant University elective su Department of Plant Department of Plant Department of Plant University elective su Department of Plant Department of Plant Second / forth Third / sixth Third / sixth Professor Preconditions for course enrollment Goals of the course programme: Gaining fundamental kn necessary for understanding of life and life processes. about the living organisms, cell structure, biological system of reproduction. Development of proper attitude to the ear other humans. Understanding of principles of inheritance knowledge. Content of the course programme: 1. Biology as science of living organisms	Course title Course code UGD102512 Study programme: University elective subject Faculty of Agriculture programme (faculty, institute, group) Level of study (first, second, third cycle) Academic year / semester First cycle Second / forth Third / sixth Professor Preconditions for course enrollment Goals of the course programme: Gaining fundamental knowledge in biology necessary for understanding of life and life processes. Gaining of wide knowledge in the living organisms, cell structure, biological systems, as well as undersof reproduction. Development of proper attitude to the each own health and in other humans. Understanding of principles of inheritance. Implementation of knowledge. Content of the course programme: 1. Biology as science of living organisms		

	4. Cel	Levelo							
		production							
	-	sics of gen							
		nt cytology							
				o of on	imal tigayog				
			of basic type	s or an	imai ussues				
		nt tissues		.1 1	-l				
		•			ology of plants				
		•	d physiology						
	12. Phylogenic and taxonomy of life organisms								
12.	,								
	research work; work in small groups; individual learning; practical classes; project								
	work;	discussior	n; debate; ind	lividual	tasks				
13.			available tim		156 hours				
14.	Distrib	ution of th	ie available ti	me	2 +2 +1				
15.	Forms of teaching activities 15.1			15.1.	Lectures - theoretical	training		2	
							hou	ırs/week	
	15.2			15.2.	Practice (laboratory, a	uditory),		2	
					workshops, outreach a	ind	hou	ırs/week	
					teamwork				
16.	Other forms of activities 16.1.			16.1.	Team projects			-	
				16.2.	Individual projects		1 hc	our/week	
				16.3.	Individual study			_	
				10.01	marriadar otday				
17.	Forms	of assess	sment						
	17.1.	Exams (ı	mid-term exa	ms, exa	am, electronic testing)			70	
	17.2.	Project a	ctivities (oral	and wr	ritten presentation)			10	
	17.3.	Other for	ms of studyir	ng activ	ities			20	
18.	Crite	ria for ass	sessment (po	ints /	to 50 points	5 (five) ((F)		
			ade)		from 51 to 60 points		6 (six) (E)		
		9.			from 61 to 70 points	7 (seven) (D)			
					from 71 to 80 points	, , , ,			
					from 81 to 90 points		8 (eight) (C)		
					•	` ,	9 (nine) (B) 10 (ten) (A)		
10	Condi	tion for a =	tting a aireat	urc	from 91 to 100 points	` ,	` '	2 paints	
19.		_	tting a signat	ure	/ 60% of term activitie			-	
	anu ta	king the fi	ııdı U XdIII		from 2 mid-term exar			ues and	
20	Long	الندما مما	ioh oloossa -		attending to lectures a Macedonian	nu uiscussi	10115		
20.	ıLandu		ich classes a	ııe	iviacedonian				
1									
24	condu		oring the acce	lity of	Solf evaluation				
21.	condu Metho	d of monit	toring the qua	ality of	Self-evaluation				
	condu Metho instruc	d of monit	oring the qua	ality of	Self-evaluation				
21.	condu Metho	d of monit ction cure			Self-evaluation				
	Metho instruct Literat	d of monit ction cure Compuls	ory literature						
	condu Metho instruc	d of monit ction cure			Self-evaluation Title	Publish	ner	Year	

	1.	Ass. Prof. Liljana Koleva Gudeva	Cell biology	Authorized	2009					
			DI 101	lessons						
	2.	Ass. Prof. Liljana	Plant Physiology	GDU - Stip	2010					
		Koleva Gudeva								
	Additional literature									
	Ordinal	Author	Title	Publisher	Year					
22.2.	number									
	1.	Prof. Jordanka	Phisiology	UKIM - Skopje	2000					
		Dimova								

App	endix No.3	Subject		programme from the first, second and third cycle studies					
1.	Title of the subj	ect	NAT	ION	AL HISTORY				
2.	Code		UGD	102	112				
3.	Stady programn	neme	First cycle / University selective course						
4.	Organization of	the	Histo	ry a	nd archeology				
	study programn	ne (unit							
	or institute,								
	department,								
	department)								
5.	Level of study	(first,	First	cycl	е				
	second, third cy	/cle)							
6.	Academic year	/	1/2	7.	Number of ECTS	5			
	semester				credits				
8.	Professor		Prof. Kiril Cackov PhD						
9.	Preconditions for	or	Subs	crib	ed 2 semester				
	course enrollme	ent							
	 Goals for the course programme: Students to gain a thorough knowledge of history; For students to develop critical thinking as a basis for scientific interpretation of human society; Formation - education as the highest human value; Training of young researchers and promoting multiculturalism in the Republic. Macedonia Formation of aesthetic, patriotic and moral values and develop a sense of belonging to their country; Study of the contents of important historical phenomena, processes and moments from antiquity to the independence of the Republic of Macedonia. 								
11.	Content of the of sciences Creati	-	-		: Subject of history, historiograp onian state	hy and auxiliary			
	Culture and rel	•							
		•			kans and in Macedonia				
	The spread of	Christian	nity an	d lite	rature in Macedonian Slavs				
	Bogomil Mover	ment							
	Byzantine rule	in Mace	donia						
	Macedonian lib	eration v	wars a	ngain	st the Byzantine Empire				
	Independent ru		_						
	Falling Macedo	onia unde	er Ser	bian	rule				

Macedonia under Ottoman rule

Resistance against Turkish rule in Macedonia (Mariovo rebellion and insurrection Skanderbeg)

Cultural, educational and religious life of the population in Macedonia

Liberation wars in the second half of the 19th century

Foreign propaganda and the consequences of their actions

Macedonia during the eastern crisis

The emergence and growth of the Macedonian national revolutionary movement

Liberation movement of the late 19th century

Ilinden Uprising in Macedonia in 1903

Consequences of the Ilinden Uprising

Macedonia after the Ilinden Uprising

Continuation of revolutionary activity and the outbreak of the Young Turk revolution in the 19th and 20th century

Cultural and national development in the 19th and 20th century

Macedonia during the Balkan Wars of 1912/13

First Macedonia during the First World War 1914-1918

Second Macedonia in the period between the two World Wars in the Kingdom of SHS and the Kingdom of Yugoslavia

Third Second World War and the Anti-Fascist War in Macedonia 1941-1943

Anti-Fascist War 1944-1945

Historical significance of the Anti

Macedonia after the Second World War 1944-1953

Macedonia in the period 1953-1991

Restoration Ohrid arheiposkopija as Macedonian Orthodox Church

The collapse of the Yugoslav federation and the independence of Macedonia in 1991

12. Methods of study:

Oral Power Point presentation

- Lectures
- Presentations
- · Seminars on topics of extra-curricular content
- Analysis of text / film / theater / literary works and so on.
- Debate and discussion
- · Analysis of the philosophical problems / problematic learning
- Individual assignments (homework, individual presentations, etc.).

Own research (internet, bibliography, library, media, etc.)..

- 13. Total available time 152
- 14. Distribution of available time 2+2+1

15.	Forms of	15.1	Lectures - theory	2 hours
	teaching		Exercises (laboratory	2 hours
	activities	15.2	auditoriski), seminars,	
			teamwork	
16.	Other forms	16.1	Project tasks	hours
	of activities	16.2	independent tasks	1 hour
		16.3	Home learning	hours

17.	Forms	of	Combined (cu	urrentl	y writing and	oral final exam)	
	assess	sment				·	
	17.1	tests			credits 40		
	17.2		inar paper / proj		credits 10		
		(presentation: written					
	and oral)						
10	17.3		vity and participa		credits20	- (c) \((=)	
18.			ssessment (poi	nts /	from 50	5 (five) (F)	
	grade)				stitch From 51 to	6 (aix) (F)	
					60	6 (six) (E)	
					from 61 to	7 (seven) (D)	
					70	7 (SCVCII) (D)	
					from 71 to	8 (eight) (C)	
					80	(1.9.1.)	
					од 81 до	9 (nine) (B)	
					90		
					From 91to	10 (ten) (A)	
					100		
19.			r getting a signa	ture	Minimum of	42 points from	current activities
			ne final exam				
20.			finstruction		Macedonian		
21.	Metho of tead		nonitoring the qu	ality	Supporting s	student self-eva	luation and evaluation
22.	literatu						
	22.1	com	pulsory literature	9	<u> </u>		
		. 7	Author	Title		Publisher	Year
		1.		Исто	рија на	Институт за	1969,1998,199,2002
				Маке	едонскиот	национална	
					д, т. 1-3,	историја	
			- д-р		рија на		1988
			Александар		едонскиот -		
			Стојановски.	наро	Д		
		I I -	д-р Иван Кантаример				
			Кантарџиев, д-р Данчо				
		I I -	д-р данчо Зогравски, д-р				
			Зогравски, д-р Михаило				
			Апостолски				
			Велјановски,	Маке	едонија	ини	2002
			H.		-1991- пат		
					езависноста		
	22.2	Addi	tional literature	1		ı	1
	1	1					