

**Study programme: Viticulture - 4 YEAR STUDY PROGRAMME**

**DIPLOMA: Graduated agricultural engineer – Vegetable grower, Baccaalaureat (NQF VI A)**

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

CODE	VII SEMESTER – FOURTH YEAR			
	Compulsory course	Credits	Classes	Total
2ZF115312	Ampelography	8	3+2+2	216
2ZF115412	Production of grape seedlings	8	3+2+2	216
2ZF107212	Nutrition of Vitis vinifera	6	2+2+1	156
	<i>Faculty elective courses</i>	4	2+1+1	120
	<i>Faculty elective courses</i>	4	2+1+1	120
	<b>Total:</b>	30	12+8+7	828

CODE	VIII SEMESTER – FOURTH YEAR			
	Compulsory course	Credits	Classes	Total
2ZF100412	Protection of grapevine	6	2+2+1	156
2ZF115512	Vine breeding	6	2+2+1	156
	<i>University elective courses</i>	6	2+2+1	156
	<i>Faculty elective courses</i>	4	2+1+1	120
	<b>Graduation thesis</b>	8	0+0+8	192
	<b>Total:</b>	30	8+7+12	780

CODE	<i>Faculty elective courses VII semestar</i>			
2ZF115612	Practices in viticulture	4	2+1+1	120
2ZF121212	Storage and packing	4	2+1+1	120
2ZF120412	Grape processing	4	2+1+1	120
2ZF117112	Grape and wine marketing	4	2+1+1	120
	<i>Faculty elective course VIII semester</i>			
2MF103712	Quality control	4	2+1+1	120
2ZF106012	Farm Management	4	2+1+1	120

Code	<i>University elective courses VII semester and VIII semester</i>			
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		Subject programme from first cycle studies			
1.	Course title	Ampelography			
2.	Course code	2ZF115312			
3.	Study programme:	Viticulture			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev"- Stip. Faculty of agriculture / Department of viticulture and fruit growing			
5.	Degree (first cycle)	First cycle			
6.	Academic year / semester	fourth year/seventh semester	7.	Number of ECTS credits	8
8.	Professor	Prof. Violeta Dimovska, Ph.D			
9.	Preconditions for course enrollment	No			
10.	Goals of the course programme: Acquiring knowledge about agro-biological and technological characteristics of grape vine varieties.				
11.	Content of the course programme: A) Lectures: 1. Introduction. Systematic identification of grape vine varieties. 2. Characteristics of Vitacea family. Subfamily Vitoidea. 3. Genus Vitis with species. Subgenera Euvitis and Muscadinia. 4. Classification of cultivated grape vine varieties. 5. Characteristics of environmental and geographical groups. 6. Description of species and varieties of genus Vitis L. Description elements of varieties. 7. European cultivated grape vine varieties. 8. Wine grape varieties. 9. Table grape varieties. 10. Seedless grape varieties. 11. Newly introduced varieties. Instantly fertile hybrids. 12. Regionalization of grape varieties and characteristics of vineyards regions. B) Exercises: 1. Elements for ampelographic description of varieties. 2. Elements for A.O of certain parts of grape vines. 3. Methods for determining the mechanical composition and structure of grape cluster and berries. 4. Methods for examining the mechanical properties of grape berries. 5. Elements affecting grape quality. 6. Climate zoning of grape vine varieties.				
12.	Methods of study: Lectures, Laboratory exercises, e-learning, individual and team projects, consultations				
13.	Total amount of available time	216			
14.	Distribution of the available time	3 +2 +2			
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	3	
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	2	
16.	Other forms of activities	16.1.	Team projects		
		16.2.	Individual projects	1	

		16.3.	Individual study		/
17.	Forms of assessment				
17.1	Exams (mid-term exams, exam, electronic testing)				70
17.2	Project activities (oral and written presentation)				10
17.3	Other forms of studying activities				20
18.	Criteria for assessment (points / grade)		to 50 points	5( five) (F)	
			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.	Condition for getting a signature and taking the final exam		/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions		
20.	Language in which classes are conducted		Macedonian		
21.	Method of monitoring the quality of instruction		Self-evaluation		
22.	Literature				
22.1.	Compulsory literature				
	Ordinal number	Author	Title	Publisher	Year
	1.	Zvonimir Bozinovic	Ampelography	Agrinet DOO Skopje	2010
	2.	Avramov I., Zunic D.	Ampelography	Faculty of agriculture Belgrade	2001
	3.	Виолета Димовска	Grape varieties	Internal script	2011
22.2.	Additional literature				
	Ordinal number	Author	Title	Publisher	Year
	1.	Avramov Lazar	Wine and table grape varieties	Faculty of agriculture Belgrade	1996
	2.	Cindric P., Korac Nada, Kovac V.	Grape varieties	Prometej-Novi Sad	2000

Appendix No.3		Subject programme from first cycle studies			
1.	Course title	Production of grape seedlings			
2.	Course code	2ZF115412			
3.	Study programme:	Viticulture			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev"- Stip. Faculty of agriculture /Department of viticulture and fruit growing			
5.	Degree (first cycle)	First cycle			
6.	Academic year / semester	fourth year/ eighth semester	7.	Number of ECTS credits	8
8.	Professor	Prof. Violeta Dimovska, Ph.D			
9.	Preconditions for course enrollment	No			
10.	Goals of the course programme:	Acquiring knowledge about conditions and technology for production of seedlings			
11.	Content of the course programme:	<p>A. Lectures: 1. Introduction. Importance of production of good raw materials and grape seedlings. 2. Grape beds. 3. Types of grape seedlings. 4. Structure of grape seedling. 5. Parent plants and technology for production of grape beds. 6. Parent plants for production of cuttings of the domestic vine <i>Vitis Vinifera</i> L. 7. Technology for production of grape seedlings. 8. Grafting. 9. Stratification. Rooting. 10. Conditions and ways of keeping the seedlings. 11. Production control and quality. 12. Distribution of diseases through the seedlings.</p> <p>B) Exercises: 1. Methods of raw material preparation. 2. Manual grafting techniques. 3. Mechanical grafting techniques. 4. Determining elements for raw material and seedlings quality. 5. Introducing the principles for registration of parent plants. 6. Keeping record books. 7. Raw material and seedlings quality standards. 8. Production procedures for pre-basic, basic, certified and standard seedlings. 9. Testing of raw material and seedlings health state.</p>			
12.	Methods of study:	Lectures, Laboratory exercises, e-learning, individual and team projects, consultations			
13.	Total amount of available time	216			
14.	Distribution of the available time	3 +2 +1			
15.	Forms of teaching activities	15.1.	Lectures - theoretical training		3

		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	2		
16.	Other forms of activities	16.1.	Team projects			
		16.2.	Individual projects	1		
		16.3.	Individual study	/		
17.	Forms of assessment					
	17.1.	Exams (mid-term exams, exam, electronic testing)		70		
	17.2.	Project activities (oral and written presentation)		10		
	17.3.	Other forms of studying activities		20		
18.	Criteria for assessment (points / grade)		to 50 points	5( five) (F)		
			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.	Condition for getting a signature and taking the final exam	/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions				
20.	Language in which classes are conducted	Macedonian				
21.	Method of monitoring the quality of instruction	Self-evaluation				
22.	Literature					
	Compulsory literature					
		Ordinal number	Author	Title	Publisher	Year
	22.1.	1.	Aleksandar Nakalamic, Nebojsa Markovic	General Viticulture	Faculty of agriculture Belgrade	2009
		2.	SlavicaTodic, Zoran Beslic	Production of grape seedlings	Dosije studio, Belgrade	2010
	Additional literature					
		Ordinal number	Author	Title	Publisher	Year
	22.2.	1.	INRA-IFV	Le Catalogue des vines cultivees en France	INRA-IFV Montpellier SubAgro	2012

1.	<b>Наслов на наставниот предмет</b>	Nutrition of Vitis vinifera		
2.	<b>Код</b>	<b>2ZF107212</b>		
3.	<b>Студиска програма</b>	Viticulture, four years		
4.	<b>Организатор на студиската програма (единица, односно институт, катедра, оддел)</b>	University "Goce Delcev"- Stip. Faculty of Agriculture		
5.	<b>Степен (прв, втор, трет циклус)</b>	First cycle		
6.	<b>Академска година / семестар</b>	fourth year/ seventh semester	7. <b>Number of ECTS credits</b>	6
8.	<b>Наставник</b>	Prof. Rubin Gulaboski, PhD		
9.	<b>Предуслови за запишување на предметот</b>	Enrollment in seventh semester		
10.	<b>Goals of the course programme:</b> Students are introduced to the basics of soil science, and nutrition of vitis vinifera plants, as well as the properties and types of fertilizers used for this purpose.			
11.	<b>Content of the course programme</b> <b>A) Lectures:</b> 1. Soils; 2. Physical and chemical properties of soils for vitis vinifera; 3. Chemical processes in the soils; 4. Mineral composition of the soils suitable for vitis vinifera; 5. Methods of chemical analysis of soils; 7. Organic matters in soils; 8. Toxic and hazard elements in soils; 9. Organic fertilizers for vitis vinifera; 10. Inorganic fertilizers for vitis vinifera; 12. Recommendation for fertilizers application. <b>B) Practices:</b> 1. Soil Types; 2. Determination of pH of soils; 3. Determination of hummus in soils; 4. Determination of N, P and K in soils; 5. Determination of redox status of soils; 6. Types of fertilizers suitable for vitis vinifera; 7. Determination of total nitrogen in fertilizers by Kjeldahl; 8. Determination of phosphorus in fertilizers; 9. Determination of microelements in soils; 10. Determination of different forms of N in fertilizers; 11. Determination of Potassium in fertilizers; 12. Determination of moisture content in fertilizers;			
12.	<b>Methods of study:</b> Lectures, Laboratory exercises, e-learning, individual and team projects, consultations.			
13.	<b>Total amount of available time</b>	156 hours		
14.	<b>Distribution of the available time</b>	2+2+1		
15.	<b>Forms of teaching activities</b>	15.1.	Lectures - theoretical training	2
		15.2.	Exercises (laboratorial, auditorial), workshops, outreach and teamwork	2
16.	<b>Other forms of activities</b>	16.1.	Team projects	0.5

		16.2.	Individual projects	0.5
		16.3.	Individual study	
17.	<b>Forms of assessment</b>			
	17.1.	17.1.	17.1.	
	17.2.	17.2.	17.2.	
	17.3.	17.3.	17.3.	
	<b>Criteria for assessment (points / grade)</b>	<b>Criteria for assessment (points / grade)</b>		<b>Criteria for assessment (points / grade)</b>
18.	<b>Condition for getting a signature and taking the final exam</b>			
			<b>Condition for getting a signature and taking the final exam</b>	<b>Condition for getting a signature and taking the final exam</b>
19.	<b>Language in which classes are conducted</b>		<b>Language in which classes are conducted</b>	
20.	<b>Method of monitoring the quality of instruction</b>		<b>Method of monitoring the quality of instruction</b>	
21.	<b>Forms of assessment</b>		<b>Forms of assessment</b>	

22	<b>Compulsory literature</b>				
	Задолжителна литература				
	Ordinal number	Author	Title	Publisher	Year
22.1	1.	Rubin Gulaboski	Chemistry-manuscript for the students enrolled at Faculty of Agriculture (available on <a href="http://www.rubingulaboski.synthasite.com">www.rubingulaboski.synthasite.com</a> )	UGD-Stip	2010
	2.	Rubin Gulaboski	Agrochemistry and plant nutrition-book and manuscript for the students enrolled at Faculty of Agriculture (available on	UGD-Stip	2013

			<a href="http://www.rubingulaboski.synthasite.com">www.rubingulaboski.synthasite.com</a>		
	3				
22.2	<i>Additional Literature</i>				
	Ordinal number	Author	Title	Publisher	Year
	1.	MARSCHNER, H	Mineral nutrition of higher plants	London Academic Press	2002
	2.				
	3.				

Appendix No.3		Syllabus for the first, second and third cycle of study			
1.	Course title	Protection of grapevine			
2.	Course code	2ZF100412			
3.	Study programme:	<b>MODULE VITICULTURE FOUR YEAR STUDIE PROGRAMME</b>			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev" - Stip, Faculty of Agriculture Department for plant and environmental protection			
5.	Level of study (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fourth year / VIII semester	7.	Number of ECTS credits	6
8.	Professor	Prof. Sasa Mitrev, Ph.D			
9.	Preconditions for course enrollment	No			
10.	Goals of the course programme: Study the basic features of phytopathogenic cause disease in grapevine, the occurrence of symptoms, diagnosis and implementation of appropriate measures to protect				
11.	Content of the course programme: <b>Content of lectures:</b> 1. Plant protection - plant quarantine, agro-technical measures 2. Prophylaxis and therapy, Mechanical protection measures 3. Physical measures, Chemical protection 4. Fungi resistance against fungicides 5. Biological suppression of plant pathogens 6. Imperfections in the grapevine - cause: abiotic factors 7. Protection measures against fungal grapevine diseases (anthracnose grapevine, grape white rot) 8. Protection measures against fungal grapevine diseases – Verticillium in grapevine gray rot and black rot 9. Protection measures against fungal grapevine diseases – cancer, eska. 10. Protection measures against fungal grapevine diseases (ashtrays, burners, bacterial cancer) 11. Protection measures against phytoplasma disease on grapevine - <i>Flavescence doree</i> , <i>Bois noir</i> 12. Measures to				



	protect against viruses - grapevine virus infectious degeneration of grapevine virus bending in grapevine leaves			
	<p><b>Contents of exercises:</b> 1. Application of measures for the protection of plants against diseases - plant quarantine, agro-technical measures 2. Mechanical protection measures - practical application - video presentation 3. Chemical protection - practical application - video presentation 4. Fungi resistance against fungicides - practical application - video presentation 5. Biological suppression of plant pathogens - practical application - video presentation 6. Imperfections in the grapevine - cause: abiotic factors - laboratory exercises 7. Protection measures against fungal grapevine diseases (anthracnose grapevine, grape white rot) 8. Protection measures against fungal grapevine diseases – <i>Verticillium</i> in grapevine gray rot and black rot 9. Protection measures against fungal grapevine diseases – cancer, eska. 10. Protection measures against fungal grapevine diseases (ashtrays, burners, bacterial cancer) 11. Protection measures against <i>phytoplasma</i> disease on grapevine - <i>Flavescence doree</i>, <i>Bois noir</i> 12. Measures to protect against viruses - grapevine virus infectious degeneration of grapevine virus bending in grapevine leaves</p>			
12.	Methods of study: lectures, theoretical and practical exercises, consultations; making independent seminar work; learning home; exam preparatory classes and mid-term tests: consultation			
13.	Total amount of available time	156 hours		
14.	Distribution of the available time	2+2+1		
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	2
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	2
16.	Other forms of activities	16.1.	Team projects	
		16.2.	Individual projects	1
		16.3.	Individual study	
17.	Forms of assessment			
	17.1.	Exams (mid-term exams, exam, electronic testing)		70
	17.2.	Project activities (oral and written presentation)		10
	17.3.	Other forms of studying activities		20
18.	Criteria for assessment (points / grade)	to 50 points		5( five) (F)
		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.	Condition for getting a signature and taking the final exam	/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions		
20.	Language in which classes are conducted	Macedonian		

21.	Method of monitoring the quality of instruction	Self-evaluation			
22.	Literature				
22.1.	Compulsory literature				
	Ordinal number	Author	Title	Publisher	Year
	1.	Pejcinovski Filip, Mitrev Sasa	Phytopathology	UGD-Stip	2007
	2.	Pejcinovski Filip, Mitrev Sasa	Phytopathology – special part	UGD-Stip	2009
	3.	Mitrev Sasa, Kostadinovska Emilija	Phytopathology practice	UGD-Stip	2010
22.2.	Additional literature				
	Ordinal number	Author	Title	Publisher	Year
	1.	Mirko S. Ivanovic Dragica M. Ivanovic	Mycosis and pseudomycosis of plants	P.P. de-eM-Ve, Pariske Komune 37	2001
	2.	Momcilo Arsenijevic	Plant bacteriosis	S Print Novi Sad	1997
	3.	Dragoljub Sutic	Plant viroses	Institute for Plant and Environmental Protection, Belgrade	1995

Appendix No.3		Subject programme from first cycle studies			
1.	Course title	Vine breeding			
2.	Course code	2ZF115512			
3.	Study programme:	Viticulture			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev"- Stip. Faculty of agriculture /Department of viticulture and fruit growing			
5.	Degree (first cycle)	First cycle			
6.	Academic year / semester	fourth year/eighth semester	7.	Number of ECTS credits	6
8.	Professor	Prof. Violeta Dimovska, Ph.D			
9.	Preconditions for course enrollment	No			

10.	Goals of the course programme: Getting knowledge for the genetics characteristic and methods in selection and their usage in creating grape vine species and base.			
11.	Content of the course programme: 1.Introduction,definition, importance of the selection, background and gathered results. 2. Systematic of the grape vine. Family, class, subspecies, gender, subtype, type, sort, variety, clone. 3. Meaning (Importance) of the starting material for selection of substrates and varieties. 4. Introduction and acclimatization. 5. Propagation of the grapevine in the selection process. 6. Species of propagation. Flowering, pollination and fertilization. 7. Genetic basis in the selection of the grapevine. Genetic variability. 8. Inheritance of quantitative and qualitative properties, change of the number of chromosomes. 9. Spontaneous and induced mutations. 10. Methods in the selection. Individual and mass selection of foundations and varieties. 11.Clone selection of substrates and varieties (sorts).Methods of creating new varieties (sorts) and foundations. 12. Hybridization, clone selection and induced mutations.			
12.	Methods of study: Lectures, Laboratory exercises, e-learning, individual and team projects, consultations			
13.	Total amount of available time	156		
14.	Distribution of the available time	2 +2 +1		
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	2
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	2
16.	Other forms of activities	16.1.	Team projects	
		16.2.	Individual projects	1
		16.3.	Individual study	/
17.	Forms of assessment			
	17.1	Exams (mid-term exams, exam, electronic testing)		70
	17.2	Project activities (oral and written presentation)		10
	17.3	Other forms of studying activities		20
18.	Criteria for assessment (points / grade)	to 50 points		5( five) (F)
		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.	Condition for getting a signature and taking the final exam	/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions		
20.	Language in which classes are conducted	Macedonian		

21.	Method of monitoring the quality of instruction	Self-evaluation			
22.	Literature				
	Compulsory literature				
	Ordinal number	Author	Title	Publisher	Year
22.1.	1.	Miladin Soskic 1980	Breeding of fruits and vine	University in Belgrade	1994
	2.	I.Pejkic	Breeding of fruits and vine	University in Belgrade	1980
	3.	Dzevat Jarebica and Mirsad Kurtovic	Breednig of fruits and vine	EDIS-Saraevo	1997
	Additional literature				
	Ordinal number	Author	Title	Publisher	Year
22.2.	1.	Edi Maletic, Jasminka Kontic, Ivan Pejic	Vitis vinifera (separate chapters)	School book, Zagreb	2008

Appendix No.3		Subject programme from first cycle studies			
1.	Course title	<b>Practices in viticulture</b>			
2.	Course code	<b>2ZF115612</b>			
3.	Study programme:	Viticulture			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev"- Stip. Faculty of agriculture / Department of viticulture and fruit growing			
5.	Degree (first cycle)	First cycle			
6.	Academic year / semester	fourth year/ eighth semester	7.	Number of ECTS credits	4
8.	Professor	Prof. Violeta Dimovska, Ph.D			
9.	Preconditions for course enrollment	No			
10	Goals of the course programme:	Acquiring knowledge of morphological and biological characteristics of grape vine, breeding patterns and systems			
11	Content of the course programme:	A. Lectures: 1. Introduction. Origins of grape vine. Regionalization and characteristics of vineyards regions in R.Macedonia. 2. Grape vine morphology. Annual biological cycle. 3. Propagation. 4. Agri-environmental conditions. 5. Grape vine planting and growing until			

	<p>yield. 6. Growing plants in full yield. 7. Growing systems and cutting methods. 8. Ripe cuttings. Green cuttings. 9. Damages caused by unfavorable climatic conditions and recovery measures. 10. Physiological disOrdinal numbers. 11. Conditions, methods and time for harvest. 12. Grape quality. Keeping possibilities. Types of processing.</p> <p>B) Exercises: 1. Grape vines arrangement plans according to terrain configuration. 2. Growing methods. 3. Winter cutting. 4. Winter cutting. 5. Method for determining the level of grape vine yield load. 6. Agro-technical measures. 7. Ampelo-technical measures. 8. Determining the level of grape ripeness. 9. Methods for determining the level of bud damage from low winter temperatures and damage recovery measures. 10. Grape quality elements. 11. Harvest methods. 12. Basic principles for grape keeping and processing.</p>			
12	<p>Methods of study: Lectures, Laboratory exercises, e-learning, individual and team projects, consultations</p>			
13	Total amount of available time	120		
14	Distribution of the available time	2 +1 +1		
15	Forms of teaching activities	15.1.	Lectures - theoretical training	2
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	1
16	Other forms of activities	16.1.	Team projects	
		16.2.	Individual projects	1
		16.3.	Individual study	/
17	Forms of assessment			
	17.1	Exams (mid-term exams, exam, electronic testing)		70
	17.2	Project activities (oral and written presentation)		10
	17.3	Other forms of studying activities		20
18	Criteria for assessment (points / grade)		to 50 points	5( five) (F)
			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	Condition for getting a signature and taking the final exam		/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions	
20	Language in which classes are conducted		Macedonian	
21	Method of monitoring the quality of instruction		Self-evaluation	
22.	Literature			
	22.1.	Compulsory literature		

		Ordinal number	Author	Title	Publisher	Year
		1.	Petar Hristov	Viticulture-general part	MAKFORM	2002
		2.	Nakalamic,.A	General Viticulture	Faculty of agriculture Belgrade	2001
		3.	Violeta Dimovska	Viticulture	Internal script	2010
22.2.	Additional literature					
	Ordinal number	Author	Title	Publisher	Year	
	1.	Aleksandar Nakalamic, Nebojsa Markovic	General Viticulture	Faculty of agriculture Belgrade	2009	

Appendix No.3		Syllabus for the first, second and third cycle of study			
1.	<b>Course title</b>	<b>Storage and packing</b>			
2.	<b>Course code</b>	<b>2ZF121212</b>			
3.	<b>Study programme:</b>	Food Processing of Animal Products			
4.	<b>Organizers of the study programme (faculty, institute, group)</b>	University "Goce Delcev"- Stip. Faculty of Agriculture			
5.	<b>Level of study (first, second, third cycle)</b>	First cycle			
6.	<b>Academic year / semester</b>	Fourth /seventh semester	7.	<b>Number of ECTS credits</b>	4
8.	<b>Professor</b>	Assist. Prof. Zoran Dimitrovski PhD			
9.	<b>Preconditions for course enrollment</b>	No			
10.	<b>Goals of the course programme:</b> Students are introduced with storage and packaging of animal products.				
11.	<b>Content of the course programme:</b> 1. Introduction 2. Types of animal products 3. Types of packaging 4. Actions packaging 5. Storage container 6. Equipment and means of filling, closing and storage containers 7. Designing packaging 8. Impact of packaging on the quality of the product 9. Impact of the product on the packaging 10. Ways of storing animal products.11. Storage conditions of animal products 12. Premises for the storage of animal products				
12.	<b>Methods of study:</b> Lectures, Laboratory exercises, e-learning, individual and team projects, consultations.				
13.	<b>Total amount of available time</b>	120 hours			
14.	<b>Distribution of the available time</b>	2+1+1			

15.	<b>Forms of teaching activities</b>	15.1.	Lectures - theoretical training	2
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	1
16.	<b>Other forms of activities</b>	16.1.	Team projects	0.5
		16.2.	Individual projects	0.5
		16.3.	Individual study	
17.	<b>Forms of assessment</b>			
	17.1.	Exams (mid-term exams, exam, electronic testing)		70
	17.2.	Project activities (oral and written presentation)		10
	17.3.	Other forms of studying activities		20
18.	<b>Criteria for assessment (points / grade)</b>	to 50 points		5 (five) (F)
		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.	<b>Condition for getting a signature and taking the final exam</b>	60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions		
20.	<b>Language in which classes are conducted</b>	Macedonian		
21.	<b>Method of monitoring the quality of instruction</b>	Self-evaluation, Periodical tests, Interim polls,		
22.	<b>Literature</b>			
22.1.	<b>Compulsory literature</b>			
	Ordinal number	Author	Title	Publisher Year
	1.	Borislav Dzinleski	Meat and meat product	Skopje 1985
	2.	Marija Karic, S Milanovic, D. Vukela	Standard methods for analyzing of milk and milk products	Bitola 2006
	3.	Aleksandar A.	Microbiology of water, food and air	Skopje 2000
22.2.	Ordinal number	Author	Title	Publisher Year
	1	Prof. d-r Rubin Gulaboski	Handbook of Food Analysis Instruments, Taylor &	

				Francis, Semih Otles (ed.) 2008.		
		2.				

Appendix No.3		Subject programme from first cycle studies			
1.	Course title	<b>Grape processing</b>			
2.	Course code	<b>2ZF120412</b>			
3.	Study programme:	Viticulture			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev"- Stip. Faculty of agriculture / Department of viticulture and fruit growing			
5.	Degree (first cycle)	First cycle			
6.	Academic year / semester	fourth year/seventh semester	7.	Number of ECTS credits	4
8.	Professor	Prof. Violeta Dimovska, Ph.D			
9.	Preconditions for course enrollment	No			
10.	Goals of the course programme:	Acquiring knowledge about exploitation of grape as raw material in the processing industry, types of processing products and production technologies.			
11.	Content of the course programme:	<p><i>A) Lectures:</i> 1. Introduction. Grape production worldwide and locally. Economic and technological value. 2. Types of processing products. Juices and concentrated juice. 4. Compote, preserve, jam and marmalade. 5. Wines (red, white, table, quality, fine, predicate) 6. Special wines: sparkling wine; sherry; liqueur wine; dessert wine; aromatized wine. 7. Distillates: brandy (grape brandy, brandy, cognac, wine distillate, wine alcohol). 8. Grape seed oil and phenolic compounds (tannins and anthocyanins). 9. Vinegar. 10. Wine lees, tartaric acid. 11. Phenolic seed extract. 12. Processing products used in cosmetics and confectionery industry.</p> <p><i>B) Exercises:</i> 1. Determine raw material quality. 2. Mechanical and chemical analysis of grapes. 3. Visiting a factory that produces soft drinks and other processing products. Introduction to technological processes. 4. Visiting a factory that produces liquors and distillates. 5. Visiting a winery and introduction to wine production technologies. 6. Visiting a pharmaceutical company which uses grape processing products in cosmetics. 7. Visiting a confectionery factory. 8. Preparing a questionnaire for the usage of grape processing products within one category of users.</p>			
12.	Methods of study:	Lectures, Laboratory exercises, e-learning, individual and team projects, consultations			



13.	Total amount of available time		120			
14.	Distribution of the available time		2 +1 +1			
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	2		
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	1		
16.	Other forms of activities	16.1.	Team projects			
		16.2.	Individual projects	1		
		16.3.	Individual study	/		
17.	Forms of assessment					
	17.1	Exams (mid-term exams, exam, electronic testing)			70	
	17.2	Project activities (oral and written presentation)			10	
	17.3	Other forms of studying activities			20	
18.	Criteria for assessment (points / grade)		to 50 points	5( five) (F)		
			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.	Condition for getting a signature and taking the final exam		/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions			
20.	Language in which classes are conducted		Macedonian			
21.	Method of monitoring the quality of instruction		Self-evaluation			
22. Ж	Literature					
	22.1.	Compulsory literature				
		Ordinal number	Author	Title	Publisher	Year
		1.	Nikićević N., Tešević V	Strong alcoholic drinks (selected chapters)	Belgrade	2008
		2.	Jovic S, Milisavljevic M	Grape and wine	Belgrade	2004
		3.				
22.2.	Additional literature					
	Ordinal number	Author	Title	Publisher	Year	

		1.	Göktürk Baydar N, Akkurt M	Oil content and oil quality properties of some grape seeds	Turkish Journal of Agriculture and Forestry <b>25</b>	2001
		2.	Cajkovic M	Cosmetology selected chapters	Naklada Spal, Zagreb	2000

<b>Appendix No.3</b>		<b>Syllabus for the first, second and third cycle of study</b>				
1.	Course title	<b>Grape and wine marketing</b>				
2.	Course code	2ZF107112				
3.	Study programme:	Enology, 4 year study programme				
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev"- Stip. Faculty of agriculture - Stip				
5.	Level of study (first, second, third cycle)	First cycle				
6.	Academic year / semester	IV year/ VII semester	7.	Number of ECTS credits	4	
8.	Professor	Ass. Prof. Elenica Sofijanova, Ph.D				
9.	Preconditions for course enrollment	-				
10.	Goals of the course programme: Introduce students with the marketing approach and the marketing concept wine and grapes with all the marketing activities and product range					
11.	<p>Content of the course programme:</p> <p>Content of lectures : 1. Introduction, concept definition and importance of marketing; 2. Marketing activities and marketing concepts; 3. Product Selection and agricultural assortment of grapes and wine; 4. Headlines way of selling grapes and wine; 5. Determination of grape and wine prices; 6. Analysis of demand and supply of grapes and wine; 7. Mechanism and grape and wine market organization; 8. Market institutions in the supply of grapes and wine; 9. Market indicators and conditions of supply of grapes and wine; 10. World market of grapes and wine 11. Republic of Macedonia's foreign trade exchange with grapes and wine; 12. Grape and wine market research.</p> <p>Contents of practice: 1. Basic principles, concepts and marketing concepts; 2. Use marketing activities and promotion concepts for new product market (wine); 3. Tracking World Turned selection of the most sought after product; 4. Methods for determining a way of selling grapes and wine; 5. Development of methods for determining prices of grapes and wine; 6. Examples of analysis of demand and supply of grapes and wine; 7. Functioning of the market mechanism and organization of grapes and wine; 8. Consideration of market institutions in the supply of grapes and wine; 9. Development of market indicators and conditions of supply of grapes and wine; 10. Graphical representations of the world's grape and wine producers; 11. Graphic display of the largest trade partners, grapes and wine; 12. Case study research on a world market for grapes and wine.</p>					
12.	Methods of study:					

	Lectures, theoretical and practical exercises, consultations; making independent seminar work; learning home; exam preparatory classes and mid-term tests: consultation.					
13.	Total amount of available time		120 hours			
14.	Distribution of the available time		2 +1 +1			
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	2		
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	1		
16.	Other forms of activities	16.1.	Team projects	0.5		
		16.2.	Individual projects	0.5		
		16.3.	Individual study	/		
17.	Forms of assessment					
	17.1.	Exams (mid-term exams, exam, electronic testing)			70	
	17.2.	Project activities (oral and written presentation)			10	
	17.3.	Other forms of studying activities			20	
18.	Criteria for assessment (points / grade)		to 50 points	5( five) (F)		
			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.	Condition for getting a signature and taking the final exam		/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions			
20.	Language in which classes are conducted		Macedonian			
21.	Method of monitoring the quality of instruction		Self-evaluation, periodic tests for students, questionnaires			
22.	Literature					
	Compulsory literature					
	22.1.	Ordinal number	Author	Title	Publisher	Year
		1.	Jakovski B.	Marketing	UKIM	2008
	2.	Tomin, A., M. Gjorovic	Markets and marketing of agricultural products	NIR "Cooperative" Belgrade	2000	
	Additional literature					
22.2.	Ordinal number	Author	Title	Publisher	Year	
	1.	Philip Kotler, Gery Amstrong	Principles of marketing	Akademski pecat, Skopje	2010	

Appendix No.3		Syllabus for the first, second and third cycle of study			
1.	Course title	Quality Management			
2.	Course code	2MF103712			
3.	Study programme:	QUALITY CONTROL			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev" - Stip, Faculty of Agriculture			
5.	Level of study (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fourth year / VIII semester	7.	Number of ECTS credits	4
8.	Professor	Prof. Sasa Mitrev, Ph.D			
9.	Preconditions for course enrollment	No			
10.	Goals of the course programme: Quality management in the modern organization. Customer loyalty. Creating a competitive market organizations. Role, importance and implementation of the ISO 9001 family of standards				
11.	Content of the course programme: 1. Introduction to quality management (quality as a strategic goal and utility organizations for competitiveness). 2. Quality management system (general requirements relating to the ISO 9001:2008 Quality Management System). 3. Management responsibility (item 5 of the standard ISO 9001:2008). 4. Resource management (item 6 of the standard ISO 9001:2008). 5. Conversion product (item 7.1, 7.2 and 7.3 of the standard ISO 9001:2008). 6. Realization of the product (see section 7.4, 7.5 and 7.6 of the standard ISO 9001:2008). 7. Measurement, analysis and improvement (item 8 of the standard ISO 9001:2008). 8. Introduction to ISO 17025, the competence of testing and calibration laboratories. 9. Introduction to ISO 27001, Information Security Management Systems. 10. Introduction to ISO 14001, Environmental Management. 11. Introducing standard OHSAS 18001 health and safety management. 12. Introduction to ISO 22000 Food Safety Management System.				
12.	Methods of study: lessons, exams.				
13.	Total amount of available time	120 hours			
14.	Distribution of the available time	2+1+1			
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	2	
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	1	
16.	Other forms of activities	16.1.	Team projects		
		16.2.	Individual projects	1	

		16.3.	Individual study		
17.	Forms of assessment				
17.1.	Exams (mid-term exams, exam, electronic testing)			70	
17.2.	Project activities (oral and written presentation)			10	
17.3.	Other forms of studying activities			20	
18.	Criteria for assessment (points / grade)		to 50 points	5( five) (F)	
			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.	Condition for getting a signature and taking the final exam		/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions		
20.	Language in which classes are conducted		Macedonian		
21.	Method of monitoring the quality of instruction		Self-evaluation		
22.	Literature				
	Compulsory literature				
	Ordinal number	Author	Title	Publisher	Year
22.1.	1.	Institute of accreditation of Republic of Macedonia	Quality management systems - Requirements (ISO EN ISO 9001:2008)	IARM	
	2.	Hrvoje Skoko	Quality management	Sinergija, Zagreb, Croatia	2000
	3.	David Hoyle	Quality Systems Handbook (4 <sup>th</sup> edition)	Butterworth-Heinemann, A member of the Reed Elsevier plc group	2001
	Additional literature				
	Ordinal number	Author	Title	Publisher	Year
22.2.	1.	Institute of accreditation of Republic of Macedonia	ISO 17025, ISO 27001, ISO 14001, ISO 22000, ISO 18001	IARM	2010
	2.				
	3.				

Appendix No.3		Syllabus for the first, second and third cycle of study			
1.	Course title	<b>Farm Management</b>			
2.	Course code	2ZF102512			
3.	Study programme:	Agromanagement , 4 year study programme			
4.	Organizers of the study programme (faculty, institute, group)	University "Goce Delcev"- Stip. Faculty of agriculture - Stip			
5.	Level of study (first, second, third cycle)	First cycle			
6.	Academic year / semester	IV year/ VIII semester	7.	Number of ECTS credits	4
8.	Professor	ass. Prof. Elenica Sofijanova, Ph.D			
9.	Preconditions for course enrollment	/			
10.	Goals of the course programme: The course aims is to present students with introductory observations on the importance of farm management through managerial functions of planning, job analysis, recruitment, selection, training and development, as well as measuring the performance of management by developing basic management skills				
11.	<p>Content of the course programme:</p> <p>A) Contents of lectures: 1. Farm management in the twenty-first century; 2. Measuring the performance of management; 3. Economic principles - choice of production levels; 4. Whole farm planning, cash flow budget 5. Farm business organization and yield; 6. Dealing with risk and uncertainty, investment analysis; 7. Obtaining resources for capital management and use of credits; 8. Control and use of land; 9. Human resource management and planning of the agricultural labor force; 10. Improving management capacity 11. Rules and regulations for agricultural labor; 12. Management of self development , SWOT-analysis.</p> <p>B) Contents of exercises: 1. Management in agriculture 2. Accounting records and comparative analysis; 3. Study of economic farm unit; 4. Planning profitability, cash flow and capital investment evaluation (practical examples); 5. Human resource planning and mechanization; 6. Sources of funding-balance sheet and income statement; 7. Tax-practice examples; 8. Marketing (examples); 9. European Union - Farm Management; 10. Agricultural marketing organizations; 11. Cereal markets - examples; 12. Livestock markets, examples;</p>				
12.	<p>Methods of study:</p> <p>Lectures, theoretical and practical exercises, consultations; making independent seminar work; learning home; exam preparatory classes and mid-term tests: consultation.</p>				
13.	Total amount of available time	120 hours			
14.	Distribution of the available time	2 +1 +1			
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	2	
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	1	
16.	Other forms of activities	16.1.	Team projects	0.5	

		16.2.	Individual projects	0.5	
		16.3.	Individual study	/	
17.	Forms of assessment				
	17.1.	Exams (mid-term exams, exam, electronic testing)		70	
	17.2.	Project activities (oral and written presentation)		10	
	17.3.	Other forms of studying activities		20	
18.	Criteria for assessment (points / grade)		to 50 points	5( five) (F)	
			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.	Condition for getting a signature and taking the final exam		/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions		
20.	Language in which classes are conducted		Macedonian		
21.	Method of monitoring the quality of instruction		Self-evaluation, periodic tests for students, questionnaires		
22.	Literature				
	Compulsory literature				
	Ordinal number	Author	Title	Publisher	Year
22.1.	1.	Donald D. Kay, William M.Edwards, Raticia A. Daffy	Farm Management (VI edition)	Publishing Center TRI	2009
	2.	Jonathan Turner, Martin Taylor	Applied Farm Management (Second Edition)	Publishing Center TRI	2010
	3.	Gareth Jones, Jennifer George	Modern Management	ISPPI, Skopje	2009
	Additional literature				
	Ordinal number	Author	Title	Publisher	Year
22.2.	1.	Biljana Bogičević	Human Resource Management	Belgrade	2004
	2.	Lloyd Byars, Leslie Rue	Human Resource Management	McGraw-Hill	2006

**UNIVERSITY ELECTIVE COURSES - Fourth year of study**

Appendix No.3		Syllabus for the first, second and third cycle of study			
1.	<b>Title of the Course</b>	<b>Fundamentals of Tourism</b>			
2.	<b>Code</b>	<b>UGD102212</b>			
3.	<b>Study Programme</b>	<b>Tourism</b>			
4.	<b>Organizer of the study programme (unit or institute, Faculty, department)</b>	University Goce Delcev-Stip Faculty of Tourism and Business Logistics Department of Gevgelija			
5.	<b>Cycle (first, second and third cycle)</b>	First cycle			
6.	<b>Academic year / semester</b>	I / I	7.	<b>Number of credits</b>	8
8.	<b>Professor (s)</b>	Ass. Prof. Zlatko Jakovlev PhD			
9.	<b>Preconditions for course enrollment</b>	Enrolled in first year studies			
10.	<b>Goals of the course programme:</b>	The objectives are scientific and practical, scientific refers to the acquisition of theoretical knowledge of students about the basics of tourism, and the practical application of scientific knowledge in the hospitality practice.			
11.	<b>Content of the course programme:</b>	Introduction 1. Theoretical and methodological approach to the study of tourism(subject, tasks, goals and methods of tourism studies) 2. Aspects of the scientific study of tourism 3. Theoretical understanding of the concept of tourism 4. Practical importance of defining tourism 5. Tourism and analog appear 6. Socio-economic conditionality tourism 7. Theoretical views on the emergence of tourism 8. Tourist need 9. Factors of tourism 10. Tourism functions 11. Tourism values 12. Tourist destination 13. Tourist attractions and activities 14. Types of tourism 15. Tourist regulation 16. Tourist differential 17. Tourist futurology			
12.	<b>Methods of study::</b>	Lectures, tutorials and laboratory exercises			
13.	<b>Total available time</b>	216 hours			
14.	<b>Distribution of available time</b>	3 + 2 + 2 / per week			
15.	<b>Forms of teaching / learning activities</b>	15.1.	<b>lectures / theoretical - contact teaching, e-teaching</b>	3 hours	
		15.2.	<b>theoretical and practical exercises,</b>	2 hours	



			<b>e-exams, preparation of independent seminar work</b>	
16.	<b>Other forms of activities</b>	16.1.	<b>Project tasks</b>	1 hours
		16.2.	<b>Individual tasks</b>	1 hours
		16.3.	<b>Home learning</b>	1 hours
17.	<b>Forms of assessment</b>			
	17.1.	<b>Tests / oral exams</b>		0-20 points
	17.2.	<b>Seminars (paper / project - presentation: written and/or oral)</b>		10 points
	17.3.	<b>Activity and participation</b>		20 points
18.	<b>Criteria for assessment (points/grade)</b>		up 50 points	5 (five) (F)
			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.	<b>Condition for getting a signature and taking the final exam</b>	60% success from all activities before exam i.e 42 points from two mid-term tests, seminar attendance of lectures and exercises		
20.	<b>Language in which classes are conducted</b>	Macedonian language		
21.	<b>Method of monitoring the quality of teaching</b>	Self-evaluation		

Appendix No.3		Subject programme from first cycle studies			
1.	Course title	<b>BIOLOGY</b>			
2.	Course code	UGD102512			
3.	Study programme:	University elective subject			
4.	Organizers of the study programme (faculty, institute, group)	Faculty of Agriculture Department of Plant Protection			
5.	Level of study (first, second, third cycle)	First cycle			
6.	Academic year / semester	Second / forth Third / sixth	7.	Number of ECTS credits	6
8.	Professor	Ass. prof. Liljana Koleva Gudeva PhD			
9.	Preconditions for course enrollment	No			

10.	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.			
11.	<b>Content of the course programme:</b> 1. Biology as science of living organisms 2. The cell and cell structural elements 3. Nucleic acids 4. Cell cycle 5. Reproduction 6. Basics of genetics 7. Plant cytology 8. Classification of basic types of animal tissues 9. Plant tissues 10. Anatomy, morphology and physiology of plants 11. Anatomy and physiology of animals 12. Phylogenic and taxonomy of life organisms			
12.	Methods of study: research work; work in small groups; individual learning; practical classes; project work; discussion; debate; individual tasks			
13.	Total amount of available time	156 hours		
14.	Distribution of the available time	2 +2 +1		
15.	Forms of teaching activities	15.1.	Lectures - theoretical training	2 hours/week
		15.2.	Practice (laboratory, auditory), workshops, outreach and teamwork	2 hours/week
16.	Other forms of activities	16.1.	Team projects	-
		16.2.	Individual projects	1 hour/week
		16.3.	Individual study	-
17.	Forms of assessment			
	17.1.	Exams (mid-term exams, exam, electronic testing)		70
	17.2.	Project activities (oral and written presentation)		10
	17.3.	Other forms of studying activities		20
18.	Criteria for assessment (points / grade)	to 50 points		5 ( five) (F)
		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.	Condition for getting a signature and taking the final exam	/ 60% of term activities or minimum 42 points from 2 mid-term exams, project activities and attending to lectures and discussions			
20.	Language in which classes are conducted	Macedonian			
21.	Method of monitoring the quality of instruction	Self-evaluation			
22.	Literature				
	Compulsory literature				
22.1.	Ordinal number	Author	Title	Publisher	Year
	1.	Ass. Prof. Liljana Koleva Gudeva	Cell biology	Authorized lessons	2009
	2.	Ass. Prof. Liljana Koleva Gudeva	Plant Physiology	GDU - Stip	2010
	Additional literature				
22.2.	Ordinal number	Author	Title	Publisher	Year
	1.	Prof. Jordanka Dimova	Phisiology	UKIM - Skopje	2000

<b>Appendix No.3</b>		Subject programme from the first, second and third cycle studies			
1.	Title of the subject	<b>NATIONAL HISTORY</b>			
2.	Code	<b>UGD102112</b>			
3.	Stady programmeme	First cycle / University selective course			
4.	Organization of the study programme (unit or institute, department, department)	History and archeology			
5.	Level of study (first, second, third cycle)	First cycle			
6.	Academic year / semester	1/2	7.	Number of ECTS credits	5
8.	Professor	Prof. Kiril Cackov PhD			
9.	Preconditions for course enrollment	Subscribed 2 semester			
10.	<ul style="list-style-type: none"> <li>- Goals for the course programme:</li> <li>- Students to gain a thorough knowledge of history;</li> <li>- For students to develop critical thinking as a basis for scientific interpretation of human society;</li> <li>- Formation - education as the highest human value;</li> <li>- Training of young researchers and promoting multiculturalism in the Republic. Macedonia</li> <li>- Formation of aesthetic, patriotic and moral values and develop a sense of belonging to their country;</li> </ul>				

	- Study of the contents of important historical phenomena, processes and moments from antiquity to the independence of the Republic of Macedonia.
11.	<p>Content of the course programme: Subject of history, historiography and auxiliary sciences</p> <p>Creating Ancient Macedonian state</p> <p>Culture and religion of Ancient Macedonia</p> <p>Settlement of the Slavs in the Balkans and in Macedonia</p> <p>The spread of Christianity and literature in Macedonian Slavs</p> <p>Bogomil Movement</p> <p>Byzantine rule in Macedonia</p> <p>Macedonian liberation wars against the Byzantine Empire</p> <p>Independent rulers Average</p> <p>Falling Macedonia under Serbian rule</p> <p>Macedonia under Ottoman rule</p> <p>Resistance against Turkish rule in Macedonia (Mariovo rebellion and insurrection Skanderbeg)</p> <p>Cultural, educational and religious life of the population in Macedonia</p> <p>Liberation wars in the second half of the 19th century</p> <p>Foreign propaganda and the consequences of their actions</p> <p>Macedonia during the eastern crisis</p> <p>The emergence and growth of the Macedonian national revolutionary movement</p> <p>Liberation movement of the late 19th century</p> <p>Ilinden Uprising in Macedonia in 1903</p> <p>Consequences of the Ilinden Uprising</p> <p>Macedonia after the Ilinden Uprising</p> <p>Continuation of revolutionary activity and the outbreak of the Young Turk revolution in the 19th and 20th century</p> <p>Cultural and national development in the 19th and 20th century</p> <p>Macedonia during the Balkan Wars of 1912/13</p> <p>First Macedonia during the First World War 1914-1918</p> <p>Second Macedonia in the period between the two World Wars in the Kingdom of SHS and the Kingdom of Yugoslavia</p> <p>Third Second World War and the Anti-Fascist War in Macedonia 1941-1943</p> <p>Anti-Fascist War 1944-1945</p> <p>Historical significance of the Anti</p> <p>Macedonia after the Second World War 1944-1953</p> <p>Macedonia in the period 1953-1991</p> <p>Restoration Ohrid arheiposkopija as Macedonian Orthodox Church</p> <p>The collapse of the Yugoslav federation and the independence of Macedonia in 1991</p>
12.	<p>Methods of study::</p> <p>Oral Power Point presentation</p> <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Presentations</li> <li>• Seminars on topics of extra-curricular content</li> <li>• Analysis of text / film / theater / literary works and so on.</li> <li>• Debate and discussion</li> <li>• Analysis of the philosophical problems / problematic learning</li> </ul>

	• Individual assignments (homework, individual presentations, etc.). Own research (internet, bibliography, library, media, etc.)..				
13.	Total available funds - 152				
14.	Allocation of the available time 2+2+1				
15.	Forms of teaching activities	15.1	Lectures - theory	2 hours	
		15.2	Exercises (laboratory auditory), seminars, teamwork	2 hours	
16.	Other forms of activities	16.1	Project tasks	hours	
		16.2	independent tasks	1 hour	
		16.3	Home learning	hours	
17.	Forms of assessment	Combined (currently writing and oral final exam)			
	17.1	tests	credits 40		
	17.2	Seminar paper / project (presentation: written and oral)	credits 10		
	17.3	Activity and participation	credits 20		
18.	Criteria for assessment (points / grade)	from 50 stitch	5 (five) (F)		
		From 51 to 60	6 (six) (E)		
		from 61 to 70	7 (seven) (D)		
		from 71 to 80	8 (eight) (C)		
		од 81 до 90	9 (nine) (B)		
		From 91 to 100	10 (ten) (A)		
19.	Condition for getting a signature and taking the final exam	Minimum of 42 points from current activities			
20.	Language of instruction	macedonian			
21.	Method of monitoring the quality of teaching	Supporting student self-evaluation and evaluation			
22.	Literature				
	22.1	Compulsory literature			
	.	Author	Title	Publisher	Year
	1.		Историја на Македонскиот народ, т. 1-3,	Институт за национална историј	1969,1998,199,2002
2.	- д-р Александар Стојановски. д-р Иван Кантарџиев, д-р Данчо	Историја на Македонскиот народ		1988	

			Зогравски, д-р Михаило Апостолски			
		3.	Велјановски, Н.	Македонија 1945-1991- пат до независноста	ИНИ	2002
	22.2	Additional literature				