Form № H- 3.01

CABINET OF MINISTERS OF UKRAINE
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES UKRAINE

EDUCATION PLANE
training specialists since 2013 year

Educational and qualification level	"Master"
Branch of knowledge	0901 "Agriculture and forestry"
Specialty	8.09010104 "Fruit and Vegetable Science and Viticulture"
Specialization	Production oriented disciplines
Master program	"Horticulture", "Protected cultivation"
Specialization	Research oriented disciplines
Master program	"Scientific research and innovation work of vegetable growing", "Scientific and innovation activity in horticulture"
Form of training	full-time
Term of study	1,5 years
Qualification of graduates	Horticulture and viticulture researcher

Implement a master's program

SRI	institute of plant sciences, ecology and biotechnologies
Faculty	agrobiology
Departments	Vegetable Growing, Gardening named after Professor V. L. Symyrenko, Soil under Cover

I. TRAINING PROCESS SCHEDULE

a) training specialists EQL “Master” since 2013 year
specialty 8.09010104 “Fruit and Vegetable Science and Viticulture”

Year of study	2013 year																		2014 year																																	
	September				30	October			28	November				December				30	January			27	February			24	March				31	April			28	May				June				30	July			28	August			
	2 7	9 14	16 21	23 28	IX 5 X	7 12	14 19	21 26	X 2 XI	4 9	11 16	18 23	25 30	2 7	9 14	16 21	23 28	XII 4 I	6 11	13 18	20 25	I 1 II	3 8	10 15	17 22	II 1 III	3 8	10 15	17 22	24 29	III 5 IV	7 12	14 19	21 26	IV 3 V	5 10	12 17	19 24	26 31	2 7	9 14	16 21	23 28	VI 5 VII	7 12	14 19	21 26	VII 2 VIII	4 9	11 16	18 23	25 30
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
I																																																	X	X	X	X
																		–	–	:	:																		:	:	X	X	X	X	X	X	–	–	–	–	–	–

Year of study	2014 year																	
	September				29	October			27	November				December				29
	1 6	8 13	15 20	22 27	IX 4 X	6 11	13 18	20 25	X 1 XI	3 8	10 15	17 22	24 29	1 6	8 13	15 20	22 27	XII 3 I
	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
II											:	:	II	II	II	//		

б) training specialists EQL “Master” since 2012 year
specialty 8.09010104 “Fruit and Vegetable Science and Viticulture”

Year of study	2013 year																		2014 year																																	
	September				30	October			28	November				December				30	January			27	February			24	March				31	April			28	May				June				30	July			28	August			
	2 7	9 14	16 21	23 28	IX 5 X	7 12	14 19	21 26	X 2 XI	4 9	11 16	18 23	25 30	2 7	9 14	16 21	23 28	XII 4 I	6 11	13 18	20 25	I 1 II	3 8	10 15	17 22	II 1 III	3 8	10 15	17 22	24 29	III 5 IV	7 12	14 19	21 26	IV 3 V	5 10	12 17	19 24	26 31	2 7	9 14	16 21	23 28	VI 5 VII	7 12	14 19	21 26	VII 2 VIII	4 9	11 16	18 23	25 30
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
II											:	:	II	II	II	//																																				

Legend:

Symbol		Meaning	Symbol		Meaning
(blank)	-	theoretical training	X	-	industrial practice
:	-	examination period	II	-	writing of master's thesis
-	-	vacation	//	-	state certification (defense of master's thesis)

II. PLAN OF THE EDUCATIONAL PROCESS

№	Subjects	The total volume		Forms of knowledge control (by semester)			Audience lessons (hours)				Independent work	The work experience		The distribution of hours per week on courses and semesters		
								including						And year of study		2 year study
														1s.	2s.	3s.
														Number of weeks per semester		
		The total number of hours	The number of credits	Exam	Test	Coursework (project)	Total	Lectures	Lab works	Practical lessons		Industrial practice	Research practice	17	17	10
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	1. REGULATORY ACADEMIC DISCIPLINES															
	1.1. . Cycle of humanitarian, social and economic training*															
1	Business foreign language	72	2	e			34		34		38			2		
2	Philosophy of science and innovative development	108	3	e			34	17		17	74			2		
3	Civil protection	36	1		t		10	10			26					1
Total number		**216**	**6**	**2**	**1**	**0**	**78**	**27**	**34**	**17**	**138**			**4**		**1**
	1.2. Cycle of natural science (fundamental) training*															
1	Methods of research in horticulture	144	4		t		68	34		34	76			4		
2	Technology in gardening, horticulture and viticulture	72	2		t		34	17		17	38			2		
Total number		**216**	**6**	**0**	**2**	**0**	**102**	**51**	**0**	**51**	**114**			**6**	**0**	**0**
	1.3. Cycle of professional and practical training*															
1	Biotechnology	108	3	e			34	17	17		74				2	
2	Certification and quality control in horticulture	144	4		t		34	17	17		110			2		
3	Biochemistry of fruits, vegetables and grapes	144	4		t		34	17	17		110				2	
4	World agricultural technologies in horticulture and viticulture	216	6	e		CW	51	17	34		165			3		
5	Organic production of green-stuffs	108	3	e			51	17	34		57			3		
6	Varieties’ study of the vegetable crops	144	4	e			51	17	34		93				3	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
7	Labor protection in industry	72	2	e			17			17	55				1	
Total number		**936**	**26**	**5**	**2**	**1**	**272**	**102**	**153**	**17**	**664**	**0**	**0**	**8**	**8**	**0**
Total according to regulatory part		**1368**	**38.0**	**7**	**5**	**1**	**452**	**180**	**187**	**85**	**916**	**0**	**0**	**18**	**8**	**1**
	2. ELECTIVE ACADEMIC DISCIPLINES															
	Production oriented disciplines															
	2.1. Disciplines chosen by University															
	2.1.1. Cycle of professional and practical training*															
1	Greenhouses	198	5.5		t		51	17	34		147				3	
2	Flower-growing in protected cultivation	180	5	e		CW	51	17	34		129				3	
3	Mushrooms growing	180	5		t		34	17	17		146				2	
4	Partial varieties study of fruit plants	198	5.5	e			34	17	17		164				2	
Total amount according the University chose		**756**	**21,0**	**2**	**2**	**1**	**170**	**68**	**102**	**0**	**586**	**0**	**0**	**0**	**10**	**0**
	2.2. Disciplines chosen by students															
	2.2.1. Cycle of professional and practical training*															
	Master program "Horticulture"															
1	Modern technologies in horticulture	180	5	e		CW	60	30	30		120					6
2	Advanced technologies in the nursery	180	5	e			50	20	30		130					5
3	Forecasting and programming harvest fruit crops	180	5	e			60	30	30		120					6
Total selected by the students		**540**	**15**	**3**	**0**	**1**	**170**	**80**	**90**		**370**			**0**	**0**	**17**
	Master program "Protected cultivation"															
1	Selection and seed-growing of vegetables in greenhouses	216	6	e			60	30	30		156					6
2	Hydroponics	216	6	e		CW	60	30	30		156					6
3	Integration plant protection in greenhouses	108	3		t		50	20	30		58					5
Total selected by the students		**540**	**15**	**2**	**1**	**1**	**170**	**80**	**90**	**0**	**370**			**0**	**0**	**17**
	Research oriented disciplines															
	2.2. Disciplines chosen by students															
	2.2.1. Cycle of professional and practical training*															
	Master program "Scientific research and innovation work of vegetable growing"															
1	Approbation of vegetables and melons crops	180	5	e			60	30	30		120					6
2	Organic vegetable	180	5	e		CW	60	30	30		120					6
3	Scientific research and innovation work of vegetable-growing in open field	180	5	e			50	20	30		130					5
Total selected by the students		**540**	**15**	**3**	**0**	**1**	**170**	**80**	**90**		**370**			**0**	**0**	**17**
	Master program "Scientific and innovation activity in horticulture"															
1	Research and innovation in horticulture	180	5	e		CW	50	20	30		130					5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Subtropical culture	180	5	e			60	30	30		120					6
3	Forecasting and programming harvest fruit crops	180	5	e			60	30	30		120					6
Total selected by the students		**540**	**15**	**2**	**1**	**1**	**170**	**80**	**90**	**0**	**370**			**0**	**0**	**17**
Total number of elected part		**1296**	**36**	**4**	**3**	**2**	**340**	**148**	**192**	**0**	**956**	**0**	**0**	**0**	**10**	**17**
Practical training		**360**	**10**													
Writing and defense of master's thesis		**216**	**6**													
Number of coursework						**3**										
Number of tests					**6**											
Number of examinations				**12**												
TOTAL FOR SPECIALTY		**3240**	**90**	**12**	**6**	**3**	**792**	**328**	**379**	**85**	**1872**			**18**	**18**	**18**

* Names of disciplines cycles in accordance with the requirements of higher education industry standards, ratified after 2007 year, EQH and EPP.

III. STRUCTURE OF A TRAINING PLAN

The disciplines	Hours	Credits	%
1. Regulatory academic disciplines	1368	38.0	42.2
1.1. Cycle of humanitarian, social and economic training	216	6.0	6.7
1.2. Cycle of natural science (fundamental) training	216	6.0	6.7
1.3. Cycle of professional and practical training	936	26.0	28.8
2. Elective academic disciplines	1296	36.0	40.0
2.1. Disciplines chosen by University	756	21.0	23.3
2.1.1. Cycle of professional and practical training	756	21.0	23.3
2.2. Disciplines chosen by students	540	15.0	16.7
2.2.1. Cycle of professional and practical training	540	15,0	16,7
3. Other load	576	16.0	17.8
Together for EQL	**3240**	**90.0**	**100**

* Names of disciplines cycles in accordance with the requirements higher education industry standards, ratified after 2007 year, EQH a EPP.

IV. SUMMARY THE BUDGET ON TIME, WEEKS

Year of study	Theoretical study	Examination period	Practical training	Writing of master's thesis	State certification	Vacation	Total
1	34	4	10	-	-	8	56
2	10	2		3	1	-	16
Together for EQL	**44**	**6**	**10**	**3**	**1**	**8**	**72**

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Production (scientific-research) practice	1, 2	360	10	10

VI. COURSE WORK

№	Subjects	Hours	Credits	Coursework	Course project
1	World agricultural technologies in horticulture and viticulture	18	0.5	CW	
2	Flower-growing in protected cultivation	18	0.5	CW	
3	Modern technologies in horticulture	18	0.5	CW	
4	Hydroponics	18	0.5	CW	
5	Organic vegetable	18	0.5	CW	
6	Research and innovation in horticulture	18	0.5	CW	

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	Writing and defense of master's thesis	216	6	4