CABINET OF MINISTERS OF UKRAINE
National University of life and environmental sciences of Ukraine

Curriculum
training specialists 2013 incoming

Educational and qualification level	«Bachelor»
Area of knowledge	0902 Fisheries and Aquaculture
Direction of training	6.090201 Water Bioresources and Aquaculture
Mode of study	daily
Duration of training	3 years 10 months
Qualification	Technologist of aquaculture production

Implement training of bachelors

Education and Research Institute of Animal Science and Water Bioresources
Fisheries faculty

I. Graph of the educational process

Class	2013 p.																		2014 p.																																	
	September					October				November				December					January				February				March					April				May				June					July				August			
	2 6	**9 13**	**16 20**	**23 27**	**30 IX 4 X**	**7 11**	**14 18**	**21 25**	**28 X 1 XI**	**4 8**	**11 15**	**18 22**	**25 29**	**2 6**	**9 13**	**16 20**	**23 27**	**30 XII 3 I**	**6 10**	**13 17**	**20 24**	**27 31**	**3 7**	**10 14**	**17 21**	**24 28**	**3 7**	**10 14**	**17 21**	**24 28**	**31 III 4 IV**	**7 11**	**14 18**	**21 25**	**28 IV 2 V**	**5 9**	**12 16**	**19 23**	**26 30**	**2 6**	**9 13**	**16 20**	**23 27**	**30 VI 4 VII**	**7 11**	**14 18**	**21 25**	**28 VII 1 VIII**	**4 8**	**11 15**	**18 22**	**25 29**
	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																		-	-	:	:																			O	:	:	-	-	-	-	O	O	O	O	-	-
II																		-	-	:	:																			:	:	O	O	O	O	O	-	-	-	-	-	-
III																		-	-	:	:														X	X	X	X	X	X	X			:	:	-	-	-	-	-	-	-
IV																:	:	-	-																:	:	-	-	II	II	II	//										

Legend:

□ - theoretical training;

X - industrial practice;

: - examination session;

II– training of bachelor’s work;

//- state certification (state examination and defense of bachelor work);

– - holidays.

II. Curricula

№	Name of academic discipline	The total volume		Forms of knowledge control by semester			Lecture classes				Independent study	Practical training		Distribution of weekly hours per semester and courses							
								including those						I course		II course		III course		IV course	
														семестри							
														1	2	3	4	5	6	7	8
														Number of weeks in a semester							
		Hours	Credits	Exam	Test	Course work (project)	Total	lecture	laboratory	practical		Teaching Practice	Industrial practice	17	18	17	18	17	15	15	15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. NORMATIVE ACADEMIC DISCIPLINES																					
1.1. Cycle of humanitarian and socio-economic training																					
1.01	Ukrainian language for professionals	108	3	1	-	-	51	-	-	51	57	-	-	3	-	-	-	-	-	-	-
1.02	Foreign language	252	7	2	1	-	122	-	-	122	130	-	-	4	3	-	-	-	-	-	-
1.03	History of Ukraine	108	3	1	-	-	51	34	-	17	57	-	-	3	-	-	-	-	-	-	-
1.04	Philosophy	108	3	3	-	-	51	34	-	17	57	-	-	-	-	3	-	-	-	-	-
1.05	History of Ukrainian culture	108	3	-	1	-	51	34	-	17	57	-	-	3	-	-	-	-	-	-	-
Total for this training cycle		**684**	**19**	**4**	**2**	**-**	**326**	**102**	**-**	**224**	**358**	**-**	**-**	**13**	**3**	**3**	**-**	**-**	**-**	**-**	**-**
1.2. Cycle of mathematical and natural-scientific training																					
2.01	Applied mathematics	144	4	1	-	-	68	34	34	-	76	-	-	4	-	-	-	-	-	-	-
2.02	Computer and software engineering	144	4	-	2	-	72	36	36	-	72	-	-	-	4	-	-	-	-	-	-
2.03	Biophysics	144	4	2	-	-	72	36	36	-	72	-	-	-	4	-	-	-	-	-	-
2.04	Chemistry	396	11	1	2, 2	-	212	88	124	-	184	-	-	4	8	-	-	-	-	-	-
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

2.05	Hydrobotanics	144	4	2	-	-	72	36	36	-	72	36/2	-	-	4	-	-	-	-	-	-
2.06	Zoology	288	8	2	1	2	140	70	70	-	148	108/2	-	4	4	-	-	-	-	-	-
2.07	Hydroecology	180	5	-	3	-	85	34	51	-	95	-	-	-	-	5	-	-	-	-	-
2.08	Hydrobiology	324	9	4	3	4	140	70	70	-	184	72/4	-	-	-	4	4	-	-	-	-
Total for this training cycle		**1764**	**49**	**6**	**6**	**2**	**861**	**404**	**457**	**-**	**903**	**216/2,4**	**-**	**12**	**24**	**9**	**4**	**-**	**-**	**-**	**-**
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1.3. Cycle of professional and practical training																					
3.01	Ichthyology	288	8	5	4	5	140	70	70	-	148	72/4	36/6	-	-	-	4	4	-	-	-
3.02	Occupational health	144	4	7	-	-	45	30	15	-	99	-	-	-	-	-	-	-	-	3	-
3.03	Physiology of fish	144	4	4	-	-	72	36	36	-	72	-	-	-	-	-	4	-	-	-	-
3.04	Fish genetics	144	4	4	-	-	68	34	34	-	76	-	-	-	-	4	-	-	-	-	-
3.05	Fish farming hydraulic engineering and basics of geodesy	180	5	5	-	5	85	34	51	-	95	36/4	-	-	-	-	-	5	-	-	-
3.06	Cultivation and breeding of fish	288	8	6	5	-	128	64	64	-	160	-	36/6	-	-	-	-	4	4	-	-
3.07	Feeding of fish	216	6	6	-	6	90	45	45	-	126	-	36/6	-	-	-	-	-	6	-	-
3.08	Aquaculture of natural reservoirs	288	8	8	7	8	120	60	60	-	168	-	36/6	-	-	-	-	-	-	4	4
3.09	Aquaculture of artificial reservoirs	576	16	8	7	7	300	150	150	-	276	-	36/6	-	-	-	-	-	-	10	10
3.10	Fishing	252	7	6	5	-	111	47	64	-	141	-	-	-	-	-	-	3	4	-	-
3.11	Economics of fishery enterprises	288	8	8	-	-	90	45	45	-	198	-	-	-	-	-	-	-	-	-	6
3.12	Ichthyopathology	144	4	5	-	-	68	34	34	-	76	-	36/6	-	-	-	-	4	-	-	-

3.13	Aquatic biochemistry	144	4	3	-	-	85	34	51	-	59	-	-	-	-	5	-	-	-	-	-
3.14	Life safety	108	3	-	4	-	54	36	-	18	54	-	-	-	-	-	3	-	-	-	-
3.15	Life safety	108	3	-	7	-	45	30	-	15	63	-	-	-	-	-	-	-	-	3	-
Total for this training cycle		**3312**	**92**	**13**	**7**	**5**	**1501**	**749**	**719**	**33**	**1811**	**108/4**	**216/6**	**-**	**-**	**9**	**11**	**20**	**14**	**20**	**20**
Total for normative academic disciplines		**5760**	**160**	**23**	**15**	**7**	**2688**	**1255**	**1176**	**257**	**3072**	**324/2,4**	**216/6**	**25**	**27**	**21**	**15**	**20**	**14**	**20**	**20**
2. ELECTIVE DISCIPLINES																					
2.1. University elective disciplines																					
1.2. Cycle of mathematical and natural-scientific training																					
1.01	Introduction to core professional course	108	3	-	1	-	51	34	-	17	57	36/2	-	3	-	-	-	-	-	-	-
1.02	Political science	108	3	-	7	-	30	15	-	15	78	-	-	-	-	-	-	-	-	2	-
1.03	Histology and embryology of aquatic animals	108	3	-	3	-	51	17	34	-	57	-	-	-	-	3	-	-	-	-	-
1.04	Fish anatomy	108	3	-	4	-	54	18	36	-	54	-	-	-	-	-	3	-	-	-	-
Total for this training cycle		**432**	**12**	**-**	**4**	**-**	**186**	**84**	**70**	**32**	**246**	**36/2**	**-**	**3**	**-**	**3**	**3**	**-**	**-**	**2**	**-**
2.1.2. Cycle of professional and practical training																					
2.01	Biological basis of fish farming	144	4	6	-	-	60	30	30	-	84	-	-	-	-	-	-	-	4	-	-
2.02	Research methodology in fish farming	144	4	-	8	-	60	30	30	-	84	-	-	-	-	-	-	-	-	-	4
2.03	Fish processing technology	144	4	7	-	-	60	30	30	-	84	-	-	-	-	-	-	-	-	4	-
2.04	Aquatic microbiology	144	4	-	4	-	72	36	36	-	72	-	-	-	-	-	4	-	-	-	-
2.05	Hydrology and meteorology	144	4	-	3	-	68	34	34	-	76	-	-	-	-	4	-	-	-	-	-
2.06	Hydrochemistry	144	4	-	4	-	72	36	36	-	72	-	-	-	-	-	4	-	-	-	-

2.07	Aquatic toxicology	216	6	5	-	-	102	51	51	-	114	-	-	-	-	-	-	6	-	-	-
2.08	aquarium basics	144	4	6	-	-	60	30	30	-	84	-	-	-	-	-	-	-	4	-	-
2.09	Design of fish-breeding enterprises	144	4	5	-	-	68	34	34	-	76	-	36/6	-	-	-	-	4	-	-	-
2.10	Latin	72	2	-	2	-	18	-	18	-	54	-	-	-	1	-	-	-	-	-	-
Total for this training cycle		**1440**	**40**	**5**	**5**	**-**	**640**	**311**	**329**	**-**	**800**	**36/2**	**36/6**	**-**	**1**	**4**	**8**	**10**	**8**	**4**	**4**
Total for normative academic disciplines		**1872**	**52**	**5**	**5**	**-**	**826**	**395**	**399**	**32**	**1046**	**72/2**	**252/6**	**3**		**7**	**11**	**10**	**8**	**6**	**4**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
2.2. Student elective courses																					
2.2.1. Cycle of humanitarian and socio-economic training																					
1.01	Religious studies	72	2	-	4	-	36	18	18	-	36	-	-	-	-	-	2	-	-	-	-
1.02	Business Law	72	2	-	8	-	30	15	-	15	42	-	-	-	-	-	-	-	-	-	2
Total for this training cycle		**144**	**4**	**-**	**2**	**-**	**66**	**33**	**18**	**15**	**78**	**-**	**-**	**-**	**-**	**-**	**2**	**-**	**-**	**-**	**2**
2.2.2. Cycle of professional and practical training																					
2.01	Fundamentals of animal husbandry	108	3	-	7	-	45	15	30	-	63	-	-	-	-	-	-	-	3	-	-
2.02	Piscivorous birds and mammals	72	2	-	6	-	30	15	-	15	42	-	-	-	-	-	-	-	2	-	-
2.03	Technical equipment in fish farming	108	3	-	6	-	45	15	30	-	63	-	-	-	-	-	-	-	3	-	-
2.04	Bioresources of hydrosphere and their use	144	4	-	7	-	60	30	30	-	84	-	-	-	-	-	-	-	-	4	-
2.05	Fundamentals of fishery protection and fishery laws	144	4	-	8	-	60	30	30	-	84	-	-	-	-	-	-	-	-	-	4
2.06	Physical education	288	8	-	1,2,3,4	-	140	-	-	140	148	-	-	2	2	2	2	-	-	-	-

2.07	*Military training*	*675*	*18*	*-*	*-*	*-*	*450*	*225*	*225*	*-*	*225*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Total for this training cycle		**864**	**24**	**-**	**9**	**-**	**380**	**105**	**120**	**155**	**484**	**-**	**-**	**2**	**2**	**2**	**2**	**-**	**8**	**4**	**4**
Total for normative academic disciplines		**1008**	**28**	**-**	**11**	**-**	**446**	**138**	**138**	**170**	**562**	**-**	**-**	**2**	**2**	**2**	**4**	**-**	**8**	**4**	**6**

III. Other training																				
Practical training	-	-	-	-	-	-	-	-	-	-	360	252	-	-	-	-	-	-	-	-
Preparation and defense of baccalaureate work	144	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of coursework (projects)	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1
Number of tests	-	-	-	34	-	-	-	-	-	-	-	-	4	5	5	7	2	3	5	4
Number of exams	-	-	29	-	-	-	-	-	-	-	-	-	5	4	3	2	5	5	2	3
Total forEQL "Bachelor"	8640	240	29	34	7	3960	1788	1713	459	4680	360	252	30	30	30	30	30	30	30	30

III. Structure of the curriculum

Series of disciplines	Hours	Credits	%
I. Humanitarian and socio-economic training	828	23	9,6
II. Math and Science Training	2196	61	25,4
III. Professional and practical training	5616	156	65,0
IV. Other load	-	-	-
Total	8640	240	100

IV. Aggregate data budget time, weeks

Courses	Theoretical study	Examination sessions	Practical training	State certification	Holiday	Total
I	35	4	5	-	8	52
II	35	4	5	-	8	52
III	33	4	7	-	8	52
IV	31	4	-	4	4	43
Total	134	16	17	4	28	199

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1.	Teaching Practice	II	180	5	5
2.	Teaching Practice	IV	180	5	5
3.	Technological (industrial) practices	VI	252	7	7

VII. STATE CERTIFICATION

1.	State exam	72	2	2
2.	Final work	72	2	2

VI. COURSEWORK AND PROJECS

№	Name of discipline	Hours	Credits	Coursework	Course project
1.	Zoology	36	1	II	-
2.	Hydrobiology	36	1	III	-
3.	Ichthyology	36	1	V	-
4.	Fish farming hydraulic engineering and basics of geodesy	36	1	-	V
5.	Feeding of fish	36	1	VI	-
6.	Industrial fish farming	36	1	-	VII
7.	Pond fish farming	36	1	-	VIII
Разом		252	7	4	3