

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

**CURRICULUM
training specialists 2013 incoming**

Educational and qualification level	“Master»
Area of knowledge	0902 “Fisheries and Aquaculture”
Speciality	8.09020101 “Water Bioresources”
Specialisation	Production
Master programs	“Sturgeon culture”, “Protection of Hydrobiological Resources”, “Methods for biochemical studies”
Specialisation	research
Master programs	“Fish fauna reservoirs comprehensive destination”
Mode of study	daily
Duration of training	1 years 6 months
Qualification	researcher aquaculture
	Implement of master programs
UNI	Education and Research Institute of Animal Science and Water Bioresources
Faculty	Fisheries
The Department	of Aquaculture, the Department of Hydrobiology, the Department of General Zoology and Ichthyology

I. GRAPH OF THE EDUCATIONAL PROCESS

a) training specialists EQL “Master” since 2013

specialty 8.09020101 “Water Bioresources”

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

b) training specialists EQL “Master” since 2012

specialty 8.09020101 “Water Bioresources”

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

Legend:

- theoretical training;

X - industrial practice;

II- Preparation Master's theses;

//- state certification (state examination and defense of master's thesis);

- - - holidays

: - examination session;

II. PLAN OF EDUCATIONAL PROCESS

№	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			
		Hours	Credits	Exam	Test	Course work (project)	Total	including those			Teaching Practice	Industrial practice	1 year of study		2 year of study	
								lecture	laboratory				practical	1 semester	2 semester	3 semester
		Number of weeks in semester														
		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 professional and practical training*																
1	Psychology of labour relations in fishery enterprises	72	2	-	1	-	34	17	-	17	38	-	-	2	-	-
2	Civil Defence in fishing industry	72	2	-	2	-	17	17	-	-	55	-	-	-	1	-
3	Acclimatization of hydrocole	108	3	2	-	-	34	17	17	-	74	-	-	-	2	-
4	Theoretical foundations of fish farming	144	4	1	-	-	51	34	-	17	93	-	-	3	-	-
5	Fisheries research methods	144	4	2	-	-	34	17	17	-	110	-	-	-	2	-
6	Theory of fish population dynamics	108	3	2	-	-	34	17	17	-	74	-	-	-	2	-
7	Basics of aquatic organisms evolution theory	108	3	-	2	-	34	17	17	-	74	-	-	-	2	-
8	Intensive aquaculture technologies	180	5	2	-	2	34	17	17	-	146	-	180	-	2	-
9	Environmental physiology and biochemistry of aquatic organisms	144	4	2	-	-	34	17	17	-	110	-	-	-	2	-
10	Financial aspects of fishery business	108	3	-	2	-	34	17	-	17	74	-	-	-	2	-
11	Modelling technological processes in fish farming	144	4	1	-	1	51	17	34	-	93	-	-	3	-	-
12	Occupational Health in fish farming	108	3	1	-	-	51	34	17	-	57	-	-	3	-	-
13	Doing business in fish farming	72	2	-	2	-	34	17	17	-	38	-	-	-	2	-
14	World fisheries	72	2	-	2	-	17	17	-	-	55	-	-	-	1	-
Total number		1584	44	8	6	2	493	272	170	51	1091	-	180	11	18	-
2. ELECTIVE ACADEMIC DISCIPLINES																
2.1 Disciplines chosen by University																

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Business foreign language	54	1,5	1	-	-	34	-	-	34	20	-	-	2	-	-
2	Philosophy of science and innovation development	54	1,5	1	-	-	34	17	-	17	20	-	-	2	-	-
3	Sustainable development of nature and society	36	1	-	1	-	17	17	-	-	17	-	-	1	-	-
4	Agricultural, land and environmental law	36	1	-	1	-	17	17	-	-	17	-	-	1	-	-
5	International standardization and certification of technologies, raw materials and finished goods	36	1	-	1	-	17	17	-	-	17	-	-	1	-	-
Total number		216	6	2	3	-	119	68	-	51	97	-	-	7	-	-
Master's degree program "Protection of hydrobioresources"																
University elective courses																
1	Protection of aquatic organisms	180	5	3	-	-	60	30	30	-	120	-	108	-	-	6
2	Management of aquatic organisms	180	5	3	-	-	40	20	20	-	140	-	72	-	-	4
3	International fisheries regulation	144	4	3	-	-	30	10	20	-	114	-	-	-	-	3
Total number		504	14	3	-	-	130	60	70	-	374	-	180	-	-	13
Disciplines chosen by students																
1	Native ichthyofauna	216	6	-	3	3	50	20	30	-	166	-	-	-	-	5
2	Specific use of aquatic resources	216	6	-	3	-	50	20	30	-	166	-	-	-	-	5
Total number		216	6	-	1	1	50	20	30	-	166	-	-	-	-	5
Total		720	20	3	1	1	180	80	100	-	540	-	180	-	-	18
Master's degree program "Sturgeon breeding"																
University elective courses																
1	Biotechnology of sturgeon breeding	180	5	3	-	-	60	30	30	-	120	-	108	-	-	6
2	Selection of sturgeon breeding objects	180	5	3	-	3	40	20	20	-	140	-	72	-	-	4
3	Biological productivity of sturgeon species	144	4	3	-	-	30	10	20	-	114	-	-	-	-	3
Total number		504	14	3	-	1	130	60	70	-	374	-	180	-	-	13
Disciplines chosen by students																
1	Sturgeon husbandry in ponds	216	6	-	3	-	50	20	30	-	166	-	-	-	-	5
2	Industrial technologies Osetrov	216	6	-	3	-	50	20	30	-	166	-	-	-	-	5
Total number		216	6	-	1	-	50	20	30	-	166	-	-	-	-	5
Total		720	20	3	1	1	180	80	100	-	540	-	180	-	-	18
Master's degree program "Ichthyofauna of mixed-use ponds"																
University elective courses																
1	Ichthyofauna of Ukrainian ponds	180	5	3	-	3	60	30	30	-	120	-	108	-	-	6
2	Ichthyocenology	180	5	3	-	-	40	20	20	-	140	-	72	-	-	4
3	Modern methods of ichthyological research	144	4	3	-	-	30	10	20	-	114	-	-	-	-	3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Total number		504	14	3	-	1	130	60	70	-	374	-	180	-	-	13
Disciplines chosen by students																
1	Prediction of catching fish	216	6	-	3	-	50	20	30	-	166	-	-	-	-	5
2	Systematics and phylogeny of fish	216	6	-	3	-	50	20	30	-	166	-	-	-	-	5
Total number		216	6	-	1	-	50	20	30	-	166	-	-	-	-	5
Total		720	20	3	1	1	180	80	100	-	540	-	180	-	-	18
Master's degree program "Methods of biochemical research"																
University elective courses																
1	Current methods and devices used in biochemical studies	288	8	3	-	-	70	30	40	-	218	-	108	-	-	7
2	Special biochemistry	288	8	3	-	-	70	30	40	-	218	-	72	-	-	7
3	Quality management activity of laboratories	144	4	-	3	-	40	10	30	-	104	-	-	-	-	4
Total		720	20	3	1	1	180	70	110	-	540	-	180	-	-	18
The number of credits		-	-	-	11	-	-	-	-	-	-	-	-	5	5	1
The number of exams		-	-	13	-	-	-	-	-	-	-	-	-	5	5	3
State exam		72	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Preparation and defence of master's work		288	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Technological (industrial) practices		360	10	-	-	-	-	-	-	-	-	-	-	-	-	-
Together for		3240	90	13	11	3	828	440	280	108	1692	-	360	18	18	18

* The names of cycles of disciplines in accordance with the requirements of the standards of high education approved after 27.08.2010 year, the EQC and OPP

III. STRUCTURE OF THE CURRICULUM

Series of disciplines	Hours	Credits	%
I. Professional and practical training	1584	44	49,0
II. Selective Courses at the option of the university	720	20	22,1
III. Selective Courses chosen by the student	216	6	6,7
IV. Other load	720	20	22,2
Total	3240	90	100

* The names of cycles of disciplines in accordance with the requirements of the standards of high education approved after 27.08.2010 year, the EQC and OPP

IV. AGGREGATE DATA BUDGET TIME (WEEKS)

Courses	Theoretical study	Examination sessions	Practical training	State certification	Holiday	Total
1	34	4	10	-	8	56
2	10	2	-	5	-	17
Together FOR	44	6	10	5	8	73

V. PRACTICAL TRAINING

№	Type of practice	Semester	Hours	Credits	Number of weeks
1	Technological (industrial) practices	I	360	10	10

VI. COURSEWORK AND PROJECs

№	Name of discipline	Hours	Credits	Coursework	Course project
1	Modeling processes in fish	36	1	-	I
2	Intensive technologies in aquaculture	36	1	-	II
3	Course project master program	36	1	-	
Total		108	3	-	3

VII. STATE CERTIFICATION

№	Component certification	Hours	Credits	Number of weeks
1	State exam	72	2	1
2	Preparation and defense of master's thesis	288	8	4