



<i>Field of study</i>		Aquaculture and Fisheries				
<i>Mode of study</i>		stationary	<i>Level</i>	first cycle		
<i>Graduate's qualification</i>		inżynier				
<i>Fields of science</i>		agricultural sciences				
<i>Disciplines of science</i>		animal science and fisheries (100%)				
<i>Educational profile</i>		general academic				
<i>Module</i>						
<i>Course unit</i>		Conservation of aquatic animals and aquatourism				
<i>Code</i>		WNOZIR/AQF/S1/				
<i>Field of specialisation</i>						
<i>Administering faculty</i>		Department of Hydrobiology, Ichthyology and Biotechnology of Reproduction				
<i>ECTS</i>		5.0	<i>ECTS (forms)</i>	5.0		
<i>Form of course credit</i>		examination	<i>Language</i>	polish		
<i>Electives</i>			<i>Elective group</i>			
<i>Form of instruction</i>	<i>Cod</i>	<i>Semester</i>	<i>Hours</i>	<i>ECTS</i>	<i>Weight</i>	<i>Credit</i>
laboratory course	L	7	30	2.0	0.50	credits
lecture	W	7	30	3.0	0.50	examination
<i>Leading teacher</i>		Więcaszek Beata (Beata.Wiecaszek@zut.edu.pl)				
<i>Other teachers</i>		Stepanowska Katarzyna (Katarzyna.Stepanowska@zut.edu.pl)				
<i>Prerequisites</i>						
<i>W-1</i>	Basic knowledge on potential threats in aquatic environment					
<i>W-2</i>	Basic knowledge on potentially threatened aquatic species					
<i>Module/course unit objectives</i>						
<i>C-1</i>	To familiarize students with problems of threatened aquatic species, as well as with law rules and international conventions concerned the aquatic environment protection and conservation					
<i>C-2</i>	Demonstration of the diving equipment and gaining the skills of underwater monitoring					
<i>Course content divided into various forms of instruction</i>						<i>Number of hours</i>
<i>T-L-1</i>	Diver. Elements of human physiology. Buoyancy control. Diving accidents. First aid. Safety rules.					2
<i>T-L-2</i>	Diving equipment. Masks, fins, snorkels. Regulators, jackets, suits (dry, winter, summer). Instruments (regulator, computer, watch, compass).					2
<i>T-L-3</i>	Water environment. Diving technics. Snorkelling, diving, using of decompression tables. Organization of diving in open water areas. Selected dive sites in the Word.					6
<i>T-L-4</i>	Diving in fisheries. The underwater monitoring.					5
<i>T-L-5</i>	Review of fish species threatened in Poland and Asia in relation to their conservation status.					5
<i>T-L-6</i>	Presentation of endangered mammalian species; evaluation their role in aquatic eco-systems					5
<i>T-L-7</i>	Review of threatened habitats - as places for reproduction and lifespan for Amphibia and Reptilia					5
<i>T-W-1</i>	DIVER. Elements of human physiology. Buoyancy control. Diving accidents. First aid. Safety rules. DIVING EQUIPMENT. Masks, fins, snorkels. Regulators, jackets, suits (dry, winter, summer). Instruments (regulator, computer, watch, compass). WATER ENVIRONMENT. DIVING TECHNICIS. Snorkelling, diving, using of decompression tables. Organization of diving in open water areas. Selected dive sites in the Word. DIVING IN FISHERIES. Divers in the aquaculture. The underwater monitoring.					2
<i>T-W-2</i>	DIVING EQUIPMENT. Masks, fins, snorkels. Regulators, jackets, suits (dry, winter, summer). Instruments (regulator, computer, watch, compass).					2
<i>T-W-3</i>	WATER ENVIRONMENT. DIVING TECHNICIS. Snorkelling, diving, using of decompression tables. Organization of diving in open water areas. Selected dive sites in the Word.					3
<i>T-W-4</i>	DIVING IN FISHERIES. Divers in the aquaculture. The underwater monitoring.					8
<i>T-W-5</i>	Laws in Poland referring to the conservation of aquatic animals in Poland. Role of the Polish Angling Association in fish conservation in Poland.					4
<i>T-W-6</i>	Role of the International Union for Conservation of Nature (IUCN) and Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington Convention) in protection of aquatic animals in the world					4
<i>T-W-7</i>	Significance of Convention on the Conservation of European Wildlife and Natural Habitats and Convention on the Conservation of Migratory Species of Wild Animals (also ASCOBANS) in conservation of animals and habitats in Europe					4

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Course content divided into various forms of instruction		Number of hours
T-W-8	Program Nature 2000 in Europe, and Marine and Aquaculture Stewardship Council in the fisheries and aquaculture in the world	3

Student workload - forms of activity		Number of hours
A-L-1	Attendance in classes	30
A-L-2	Studying of literature	10
A-L-3	Consulting with tutors	10
A-L-4	Preparing the presentations	10
A-W-1	Participation in lectures	30
A-W-2	Study of literature	30
A-W-3	Consultation with tutor	20
A-W-4	Preparing for exam	10

Teaching methods / tools	
M-1	Lecture
M-2	Presentation
M-3	Practical classes with diving
M-4	Work with data bases

Evaluation methods (F - progressive, P - final)		
S-1	F	Test
S-2	F	passing the written part
S-3	F	practical assessment

Designed learning outcomes	Reference to the learning outcomes designed for the fields of study	Reference to Learning Outcomes for qualifications at PQF 6, 7 or 8	Reference to learning outcomes for qualifications at level 6 or 7 that enable acquiring engineering competences	Course objectives	Course content	Teaching methods	Evaluation methods
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Knowledge								
AQF_1A_C28_W01 DIVING TECHNIQUES AND DIVING IN FISHERIES. Snorkelling and diving. Organization of diving in open water areas. Selected dive sites in the World. Divers in the aquaculture. The underwater monitoring.	AQF_1A_W09	P6S_WG		C-2	T-W-2 T-W-3	T-W-4	M-2 M-3	S-3
AQF_1A_C28_W02 Student knows the international legal rules and conventions in the field of aquatic animals conservation	AQF_1A_W02	P6S_WG	P6S_WG	C-1	T-L-5 T-L-6	T-L-7	M-1 M-4	S-1 S-2

Skills								
AQF_1A_C28_U01 Student can organize aquatic activity (e.g. plan of diving).	AQF_1A_U22	P6S_UO P6S_UW		C-2	T-W-2 T-W-3	T-W-4	M-2 M-3	S-2 S-3
AQF_1A_C28_U02 Student is able to link threatened aquatic animals and conservations protecting them	AQF_1A_U02	P6S_UK P6S_UW		C-1	T-W-6 T-W-7	T-W-8	M-1 M-4	S-1 S-2

Social competences								
AQF_1A_C28_K01 Student has the ability to sustainable underwater activity.	AQF_1A_K03	P6S_KO P6S_KR		C-1 C-2	T-W-1 T-W-5	T-W-6	M-1 M-3 M-4	S-1 S-3
AQF_1A_C28_K02 Student can indicate forms of conservation for particular species of threatened aquatic animals	AQF_1A_K03	P6S_KO P6S_KR		C-1	T-L-6 T-L-7	T-W-5 T-W-6	M-1 M-2	S-1 S-2

Outcomes	Grade	Evaluation criterion
Knowledge		
AQF_1A_C28_W01	2,0	
	3,0	Student has a basic knowledge on organization of diving in open water areas. Can select dive sites in the World. Student has a basic knowledge on the underwater monitoring.
	3,5	
	4,0	
	4,5	
	5,0	



Knowledge

AQF_1A_C28_W02	2,0	
	3,0	Student knows the most important international legal rules and conventions in the field of aquatic animals conservation
	3,5	
	4,0	
	4,5	
	5,0	

Skills

AQF_1A_C28_U01	2,0	
	3,0	Student can present a simple plan of diving
	3,5	
	4,0	
	4,5	
	5,0	
AQF_1A_C28_U02	2,0	
	3,0	Student knows at least 50% of demonstrated aquatic animals species and knows the most important conventions
	3,5	
	4,0	
	4,5	
	5,0	

Other social competences

AQF_1A_C28_K01	2,0	
	3,0	Student can demonstrate a basic underwater activity
	3,5	
	4,0	
	4,5	
	5,0	
AQF_1A_C28_K02	2,0	
	3,0	Student can indicate the basic forms of aquatic animals conservation
	3,5	
	4,0	
	4,5	
	5,0	

Required reading

1. <https://www.cmas.org/>, CMAS World Underwater Federation, 2020
2. www.padi.com, PADI online learning, 2020
3. <https://www.iucnredlist.org/>, The IUCN Red List of Threatened Species, 2021