

#### 2018/2019 AcademicYear List of courses

Code/Credits	Course	Semester Winter / Spring	Contents	ContactDetails of Lecturer	Department
TSU104	Ecology	Spring	Subjects of ecology and its sections, ecological factors and their effects on organisms, population and structural characteristics, population dynamics, community and their properties, the concept of ecosystem-elements-functional properties, matter cycles in ecosystems.	Name-Surname:Banu KUTLU E-mail: banukutlu@munzur.edu.tr Tel:(428) 2125915-2535	Faculty of Fisheries - Fisheries Engineering
TSU102	Aquatic Plants	Spring	Biology of aquatic plants, cytologic and biochemical properties, morphology, growth, and life cycle. Characterization of aquatic plants, their ecology, ecological factors in their distribution, ecological classification of freshwater sytems and their biota; culture of	Name-Surname:Banu KUTLU E-mail: banukutlu@munzur.edu.tr Tel:(428) 2125915-2535	Faculty of Fisheries - Fisheries Engineering



aquatic plants,	
usage areas,	
cultured	
aquarium plants,	
description of	
culture	
techniques for	
Porphyra,	
Gracilaria, and	
Undaria.	
TSU 211 Oseanology Winter General Name-Surn	ame:Banu Faculty of
characteristics of KUTLU	Fisheries -
oceans, E-mail:	Fisheries
	munzur.edu.tr Engineering
	125915-2535
sedimentation in	
oceans, general	
composition of	
seawater,	
synoptic-	
dynamic	
physical	
oceanography,	
marine ecology	
and living	
communities,	
marine	
resources-	
utilizing them	
and equipment	
used in	
oseanological	
research.	
TSU213 Aquatic Winter Main structures Name-Surn	ame:Banu
Invertebrates of animal KUTLU	
systematics; E-mail:	
	mungun ada ta
	munzur.edu.tr
	125915-2535
ecological	
features of	
invertebrates;	
general	
characteristics of	
economical	
important	
l amazina af	
species of invertebrate	



			groups from Protozoa to		
			Echinodermata		
TSU 210	Planktology	Spring	Echinodermata The course will include a review of a general knowledge of marine planktonic organisms, improve the knowledge of marine plankton ecology, and try to describe mechanisms and relations, and the study of plankton. Terminology of limnoplanktonic organisms, taxonomy of phytoplankton and zooplanktoni indices releated to the limnoplanktonic biodiversity of	Name-Surname:Banu KUTLU E-mail: banukutlu@munzur.edu.tr Tel:(428) 2125915-2535	Faculty of Fisheries - Fisheries Engineering
			Turkey.		
TSU305	Marine mammals, Birds and Reptiles	Winter	Systematics of marine mammals and reptiles, their general biology, evolutionary history, distinguishing features, distribution, biology, population status, behavior, and conservation.	Name-Surname:Banu KUTLU E-mail: banukutlu@munzur.edu.tr Tel:(428) 2125915-2535	Faculty of Fisheries - Fisheries Engineering



Faculty of Fisheries - Fisheries
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Engineering
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	limnoplankton,	
	Limnoplanktonic	
	biodiversity of	
	Turkey.	

#### 20.../20... AcademicYear List of TraineeshipVacancy

Number of theVaca	Credit (Numberifitsoffer ed)	Conten ts	ContactDeta ils of theMentor	DepartmentAcademicorAdministrativedepar tment
ny			Name- Surname: E-mail: Tel:	
			Name- Surname: E-mail: Tel:	



20.../20... AcademicYear List of courses (Master of Science, M.Sc.)

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Code/Credits	Course	Semester Winter / Spring	Contents	ContactDetails of Lecturer	Department
SM-5013/2+2, 3	Nutritional Requirements in Finfish and Feed Preparation	-	It will be explained importance of fish feeding, nutritional requirements of freshwater and sea finfish species; feed raw materials and rations and feed preparation	Name-Surname: Durali DANABAS E-mail: ddanabas@munzur.edu. tr Tel:	Institute of Science and Technology, Fisheries
SM-5046/3+0, 3	Fish Physiology	-	It will be explained the reproductive, urinary, feeding, respiration, circulatory and endocrine systems and their physiological principals in fish; and their interactions with internal and environmental factors; and their importance in aquaculture.	Name-Surname: E-mail: Tel:	
SM-5048/3+0,	ENDOCRÍNOLOGÍCAL APPLICATIONS IN	-	It will be explained the hormonal control	Name-Surname: E-mail:	

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Aktuluk Kampüsü 62000 Tunceli/Türkiye Tel:+904282131794



3	AQUACULTURE		in inducing of	Tel:	
	7.407.002.01.2		gametogenesis and	101.	
			ovulation; hormonal		
			and environmental		
			control of fish		
			reproduction;		
			mechanism of sexual		
			control;		
			environmental and		
			dietary effects on		
			growth and		
			metabolism in		
			hormonal		
			development; and		
			using of		
			endocrinological		
			components in stress,		
			adaptation,		
			aquaculture,		
			resistance to diseases		
SM-5049/3+0,	Pigmentation in	_	It will be explained		
3	Fisheries		importance, existence		
			and affectability of		
			pigmentation in		
			fisheries, pigment		
			kinds and cells		
			structure, effects of		
			pigments on		
			pigmentation of		
			especially fish, and		
			however shrimps,		
			crabs and others,		
			carotene contents of		
			planktonic organisms		



		using in aquaculture and their effects on pigmentation of fish and effective components on pigmentation.	
SM-5050 /3+0, 3	COMPARATIVE FISH ENDOCRINOLOGY	It will be explained the endocrinology and chemical messengers in lives, anatomic and physiologic structures and hierarchical structure of endocrine system and its components and these components among lives groups (vertebrate, invertebrate, insect, bird, fish, reptile, mammalian etc.) as comparative.	



#### **List of courses (Philosophy of Doctorate, Ph.D.)**

Code/Credits	Course	Semester Winter / Spring	Contents	ContactDetails of Lecturer	Department
SM-6048/3+0, 3	Fish Feeding Physiology and Biochemistry	-	It will be explained importance of fish feeding, nutritional requirements of freshwater and sea finfish species; feeding physiology; metabolism, growth, appetite-repletion, digestion and its enzymes; and nutrition components.	Name-Surname: Durali DANABAS E-mail: ddanabas@munzur.edu.tr Tel:	Institute of Science and Technology, Fisheries
SM-6019/ 3+0, 3	Feed Additives in Fish Feeding	-	It will be explained importance of fish feeding; nutritional requirements of freshwater and sea finfish species; feeding	Name-Surname: E-mail: Tel:	

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n c n a a e a a fi	physiology; nutrition components; mixed feeds in aquaculture; effects of feeds and process on feeding preparation; raw materials and properties, using preparing of mixed feeds and properties and effects of feed additives.		
		Name-Surname: E-mail: Tel:	



#### **List of courses (Bechalor Degree)**

Code/Credits	Course	Semester Winter / Spring	Contents	ContactDetails of Lecturer	Department
TSU203 / 2+0, 2	Genetic	Winter	The historical development of genetics, the importance of genetics in our lives, genetic basic characteristics, heredity plans, mendel genetics, basic concepts about mutations.	Name-Surname: Durali DANABAS E-mail: ddanabas@munzur.edu.tr Tel:	Institute of Science and Technology, Fisheries
TSU311 / 1+2, 2	FISHERIES MECHANIZATION	Winter	The main topics covered in this course are; Introduction, live fish transport, fishery and transportation	Name-Surname: E-mail: Tel:	



	1		C C' 1	Ī	
			of fishery		
			products,		
			water supply,		
			drilling and		
			water		
			transmission		
			systems,		
			mechanization		
			systems used		
			in fishing		
			boats and fish		
			farming units.		
	DESIGN OF	Spring	It will be	Name-Surname:	
	AQUACULTURE FACILITIES		explained the	E-mail:	
TSU308/ 2+2, 3	77.61211125		preparation of	Tel:	
			aquaculture		
			facilities of		
			commercial		
			finfish species,		
			of necessary		
			projects to		
			aquaculture,		
			and of		
			feasibility		
			reports of		
			pond, cage and		
			hatchery		
			facilities.		
TSU401/2+2, 3	FISH FEEDING AND FEED	Winter	The most		



TECHNOLOGY	important
	points in
	aquaculture
	are fish
	feeding,
	nutrition
	determination
	of finfish
	species in
	culture stages.
	The make
	sense of
	feeding
	physiology
	provide an
	advantage for
	providing of
	this
	requirement. It
	will be
	explained
	feeding in fish,
	metabolism,
	appetite,
	enzymes, their
	properties and
	effects in
	digestion,
	nutrition



components	
and their	
properties	
(proteins,	
lipids,	
carbohydrates,	
vitamins, etc.),	
fish feed	
technology,	
production	
technology of	
mixed feeds	
(equipments	
using in	
preparation of	
mixed feeds	
and stages of	
preparation of	
feeds),	
extraction,	
mixed feed	
machines	
(extruder	
systems,	
expander	
systems, pellet	
cooking and	
UP/C system).	



#### 20.../20... Academic Year List of courses

Code/Credits	Course	Semester Winter / Spring	Contents	Contact Details of Lecturer	Department
TSU 313	SEAFOOD PROCESSING TECHNOLOGY	Winter	The state of seafood processing technology at present and in the future, biochemical rates of different seafood species and factors effecting these biochemical rates, chemical, physical, microbiological and sensory changes after catching, preprocessing technology (filleting etc.) in seafood, chilling, freezing, smoking, canning, salting, drying, marinating, surimi and packing technologies in seafood, fermented fish products, fish and shellfish waste utilization, practices of these processing techniques in different seafood	Name-Surname: Assoc. Prof. Dr. Gülderen Kurt Kaya E-mail: gkurtkaya@munzur.edu.tr Tel:5057217861	Faculty of Fisheries  Department of Fish Processing Technology



TSU 315	1		Canara <sup>1</sup>	Nama Cymana	Foorly of
180 313	Design and		General	Name-Surname:	Faculty of
	Equipment		properties of	Assoc. Prof. Dr. Gülderen	Fisheries
	of Seafood		seafood	Kurt Kaya	
	Processing		processing	E-mail:	Department of
	Plants	Winter	plants, the	gkurtkaya@munzur.edu.tr	Fish Processing
			location,		Technology
			substructure,	Tel:5057217861	
			technical and	101.3037217001	
			physical		
			conditions of		
			seafood		
			processing		
			plant,		
			characteristics		
			of tools and		
			equipment used		
			in processing		
			plants, the		
			design and		
			planning of a		
			optimum		
			processing unit,		
			sections to be		
			found in		
			processing		
			plants, the		
			features of		
			storage units,		
			hygiene		
			mechanism in		
			processing		
			plants, cleaning		
			and disinfection		
			applications,		
			measures should		
			be taken in		
			seafood		
			processing		
			plants for		
			personal		
			hygiene,		
			technical tour to		
			regional seafood		
			processing		
			plants		
	Food safety	Winter	Hygiene in the	Name-Surname:	Faculty of
	and quality		food industry,	Assoc. Prof. Dr. Gülderen	Fisheries
TSU 403	management		food safety,	Kurt Kaya	
	systems		hazardous	E-mail:	Department of
			substances in	gkurtkaya@munzur.edu.tr	Fish Processing
			the food	garage Chimban Odd. II	Technology
	1		l		1 centrology



	industry	Tel:5057217861
	prerequisite	
	programs	
	(GMP, GHP,	
	GSP, etc.),	
	HACCP system,	
	BRC and IFS	
	systems,	
	changes brought	
	about by ISO 22000 food	
	safety	
	management	
	system and	
	standards,	
	HACCP and	
	ISO 22000	
	manual,	
	implementation	
	phases of	
	HACCP and	
	ISO 22000	
	systems at	
	seafood	
	products	
	processing	
	plants; relevant	
	documentation	
	and record	
	systems,	
	integration of	
	system to a	
	seafood	
	products	
	processing plant	
	the application	
	of food safety	
	management	
	system in the food sector,	
	food sector, introduction of	
	quality	
	management	
	system, quality	
	management	
	systems,	
	implementation	
	of quality	
	management	
	systems in the	
	food sector, the	
Address Mynayn University	changes brought	



			about by the ISO 9001:2008 standard		
TSU 406	Seafood Quality Control	Spring	Importance and basic concepts of quality control in fisheries. Control of nutritional elements (crude protein, fat, minerals) in fisheries. Sensory, chemical, physical and microbiological analysis used in determining quality of fresh and processed products.	Name-Surname: Assoc. Prof. Dr. Gülderen Kurt Kaya E-mail: gkurtkaya@munzur.edu.tr Tel:5057217861	Faculty of Fisheries  Department of Fish Processing Technology
TSU 420	Hygiene and Sanitation in Aquacultural	Spring	The basic principles of hygiene at aquacultural facilities and sanitation. Purpose and importance of food hygiene. The microbial ecology of seafood products. Health risks emanate from seafood products. Pathogenesis of food borne Infections. Food infection and intoxication. The importance of water used in cleaning food premises and production of food and water hygiene. Implementation of cleaning and disinfection. The	Name-Surname: Assoc. Prof. Dr. Gülderen Kurt Kaya E-mail: gkurtkaya@munzur.edu.tr Tel:5057217861	Faculty of Fisheries  Department of Fish Processing Technology



	classification of	
	detergents and	
	disinfectants used	
	and the properties	
	they should have.	
	Microbiological	
	control methods.	
	Personnel	
	hygiene. Seafood	
	markets	
	disinfection.	
	Importance of	
	hygiene at	
	Seafood	
	transportation	