Faculty of Marine Science and Technology

Courses Taught in English for Exchange Students

No	Degree (Associate, Bachelor, Master, Doctorate)	Department	Lecturer's Title and Name	Code	Course's Name	Compulsory or Elective	Academic Year	ECTS	Term	Course Content (please provide a web link if applicable)	Medium of Instruction	Learning Outcome (please provide a web link if applicable)	Education Type (face to face or online)	Prerequisites and co-requisities (please provide a web link if applicable)	Recommended or Required Reading (please provide a web link if applicable)	Planned Learning Activities and Teaching Methods (please provide a web link if applicable)	Assessment Methods and Criteria (please provide a web link if applicable)
1	Bachelor	Aquaculture	Prof. Sehriban ÇEK	SÜM2-3509	Aquarium Fish Breeding	Compulsory	2025-2026	4	Autumn	Introduction to the aquarium sector in the world and Turkey, aquarium construction, lighting, heating, filtration, water quality, aquarium fish feeds and feeding, aquatic plants and aquascaping, breeding livebearing aquarium fish, breeding egg-scattering aquarium fish, breeding mouthbrooding aquarium fish, and breeding bubble-nest building aquarium fish.	English	1 Designing and constructing aquariums, 2 breeding livebearing aquarium fish, 3 breeding egg-scattering aquarium fish, 4 breeding mouthbrooding aquarium fish, 5 breeding bubble-nest building aquarium fish, 6 working in aquarium enterprises	face to face	none	You and Your Aquarium, Mills, Dick ISBN: 0-394-72985-4, Hong Kong, 1986. Complete introduction to breeding aquarium fish, Herbert R. Axelrod ISBN 9780866222945	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design
2	Bachelor	Aquaculture	Prof. Sehriban ÇEK	SÜM2-2404	Anatomy and Physicology	Compulsory	2025-2026	4	Spring	"Introduction to fish anatomy and physiology; external anatomical structures (eyes, scales, mouth and jaws, opercula, fins, and lateral line); the skeletal, digestive, respiratory, circulatory, renal and excretory, muscular, reproductive, and endocrine systems (including the genital systems) of fish will be explained comparatively with other vertebrates and mammals, as the physiological systems of fish can be compared to those of mammals and other vertebrates; furthemore, the structure of the dermis, pigment cells, electric organs, as well as epidermal and venom glands in fish will also be covered.	English	Students will be able to compare fish anatomy and physiology with the anatomy and physiology of other vertebrates and mammals, design comparative biological experiments, identify the microscopic and macroscopic structures of fish through laboratory exercises, utilize fish as model organisms in biomedical research due to the common ancestry shared by fish and mammals, and work in fish farms.	face to face	none	elson, J.S. 2006. Fishes of the World, 4th ed. John Wiley and Sons, Hoboken, NJ 4-Kardong, K.V. 2008. Vertebrate Comparative Anatomy, Function, Evolution, 5th ed. McGraw Hill, Boston, MA 5- Timur, G. 2008. Balık Anatomisi, Nobel Akademik Yayıncılık. 6-Timur, M. 2011. Balık Fizyolojisi Nobel Akademik Yayıncılık	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design
3	Bachelor	Aquaculture	Prof. Dr. Yavuz MAZLUM	SÜM2-4705	Economics and Marketing of Fisheries	Compulsory	2025-2026	4	Fall	This course covers the overall functions and structures of the economy, bonding of fisheries with the economy and contributions of the fisheries sector to the economy	English	explain the main principles of the economy, 2 explain national and international commercial integrations, 3 explain the theory of price, 4 explain necessary information about production, investment, requirement and economical designs,	face to face	none	Emiroğlu, D.,Elbek, A.G., 2011. Genel Ekonomi, Ege Üniversitesi Yayınları, Su Ürünleri Fakültesi Yayın no: 73, Ders Kitabı Dizin no: 35 Engle, C.R., 2010. Aquaculture Ekonomics and Financing: Management Analyses, Wiley-Balckwell, 272 page;	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design
4	Bachelor	Aquaculture	Prof. Dr. Yavuz MAZLUM	SÜM2-3571	Recirculating system in Aquaculture	Elective	2025-2026	3	Fall	This course covers the development and current trends in aquaculture worldwide and in Türkiye, with a focus on sustainability and the transition from open cage systems to closed recirculating aquaculture systems (RAS). The fundamental components of RAS, water quality and waste management, food safety, and product quality are examined. In addition, the economic aspects of closed systems, their potential for new ventures, and future technological perspectives in sustainable aquaculture are discussed.	English	1. look at a system and make a good judgment as to how well the system will operate,2)work with a systems designer to develop an aquatic production system of your own, and kwonw what to look for when shopping for aquacultural production systems.3 will be able to compare their own systems with other aquaculture systems	face to face	none	Recirculating Aquaculture By M.B. Timmons and J.M. Ebeling Fish Farmung In Recirculating Aquaculture Systems, Louis A. Helfrich and George Libey	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design
5	Bachelor	Aquaculture	Doç. Dr. Ece KILIÇ	SÜM2-3581	Microplastic Pollution in Aquatic Environments	Elective	2025-2026	5	Fall	To enable students to learn about the sources, transport, and effects of microplastic pollution on aquatic organisms; within this scope, plastic pollution, classification of plastics based on their size and formation, the generation and primary sources of microplastics, and microplastic determination methods in different ecosystems will be covered	English	Students will know the current legislation and importance regarding plastic pollution, understand the formation, distribution, and primary sources of microplastics, comprehend the link between microplastics and the food chain, learn the methods for researching microplastic pollution, and acquire knowledge about ways to reduce microplastic contamination	face to face	none	Mikroplastiklerden Nanoplastiklere Plastik Kirleticiler. (2023). Nobel Yayınları.	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design
6	Bachelor	Aquaculture	Doç. Dr. Ece KILIÇ	SÜM2-4890	Mass Transport Processes in Environmental Sciences	Elective	2025-2026	8	Spring	To enable students to learn about the mass transport kinetics, understand mass balance equations.	English	Students will understand global climate change, know mass transport processes, and comprehend the concepts of pollutant sinks and transport	face to face	none	Clark M.M. (2009). Transport Modeling for Environmental Engineers and Scientists Hemond ve Fechner. 2000. Chemical Fate and Transport in the Environment Logan. B.E. 1999. Enviromental Transport Processes	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design
7	Bachelor	Aquaculture	Dr. Öğr. Üyesi Ayhan ALTUN	SÜM2-3614	Aquatic Pollution and Genetics	Elective	2025-2026	6	Spring	To examine the responses of organisms to pollutants, including physical, biochemical, and genetic changes at both the population and community levels	English	Students will comprehend the sources of water pollution, identify and evaluate the nature of organismal responses to pollutants through changes at both the population and community levels, master the molecular and chromosomal genetic effects of pollutants on aquatic organisms, know the genotoxic tests utilized in aquatic organisms, and understand the degree and nature of the effects that aquatic pollutants exert on organisms	face to face	none	-	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design

Master/Doc	Aquacultu	Prof. Dr. Y	SUR3-5102	Design and	Elective	2025-2026	8	Fall	This course will examine the basic principles of design and analysis of experiments. Upon completion of this course, students should be better prepared to plan, conduct and analyze their research studies and to critically review research literature.	English	Upon successful completion of this course, the students will be able to:This course will examine the basic principles of design and analysis of experiments. Upon completion of this course, students should be better prepared to plan, conduct and analyze their	face to face	Basic Statis	Statistical F	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design

Master/Doc	Aquacultu	Prof. Dr. Y	SUR3-5064	Hatchery M	Elective	2025-2026	8	Spring	Crayfish as a food item. Historical developm ent of crayfish culture. Crayfish life cycle and related aspects of culture. Dry phase and wet phase. Culture systems, Monocult ure and rotational systems. The most important criteria of Cambarid ae, Astacidae and Parastacia de families'	English	This course covers with fish hatchery managem ent, hatchery design and constructi on, hatchery hygienic condition, economic analyses and investmen t cost.	face to face	none	Biology of Freshwate r Crayfish, Crustacea n and Mollusk Aquacultu re and Crustacea n Farming	Lecture, Question-Answer, Discussio n, Drill and Practice, Demonstr ation, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homewor k Assignme nt, Project / Design

Master/Doc	Aquacultu	Prof. Dr. Y	SUR3-5103	Biology and Ecology of Freshwater Decapod	Elective	2025-2026	8	Fall	This cour	English	Upon successful completion of this course, the students will be able to: Explain the scope of lobster farming in the World and Turkey, Describe the characteristics of lobster Explain	face to face	none	Biology, Management, Aquaculture and Fisheries, Crustacean and Mollusk Aquaculture and Crustacean Farming	Lecture, Question-Answer, Discussion, Drill and Practice, Demonstration, Group Study, Lab/ Workshop / Field Practice	Testing , Oral Exam, Homework Assignment, Project / Design