



2022-2023 Academic Year
List of Courses Offered in Foreign Language

Faculty of Fisheries
Su Ürünleri Fakültesi

	Department <i>Bölüm</i>	Course Code <i>Ders Kodu</i>	ECTS <i>AKTS</i>	Course Title <i>Dersin Adı</i>	Semester <i>Dönem</i>	Course Content <i>Dersin İçeriği</i>	Academic Staff <i>Dersi Veren Öğretim Elemanı</i>	Online Available <i>Çevrimiçi</i>
1	Basic Sciences Division <i>Temel Bilimler</i>	ESÜM 109	4	Aquamatic Microbiology	Spring	In this course; students learn of the vital role of aquatic prokaryotic, eukaryotic microorganisms and viruses with particular emphasis on marine and fresh water habitats. They will explore the dynamic interactions that take place between microbial communities (deep, surface and thermal), the diversity of aquatic microorganisms and their adaptations, nutrient cycles, oligotrophy, identification methods in aquatic microbiology will be learned.	Assoc. Prof. Dr. İ. Tülay Çağatay	Yes
2	Basic Sciences Division <i>Temel Bilimler</i>	ESÜM 114	4	Aquamatic Microbiology Laboratory	Spring	The practical course; trains students in practice in methods used in aquatic microbiological research. By the end of the course, students are familiar with many techniques such as; filtration and quantification of microbial biomass, isolation, cultivation and identification of aquatic microorganisms with aerobic and anaerobic techniques, Prokaryotic and Eukaryotic microbiology groups, Phototrophic microorganisms, viruses.	Assoc. Prof. Dr. İ. Tülay Çağatay	Yes
3	Basic Sciences Division <i>Temel Bilimler</i>	ESÜM 110	4	Blue Biotechnology	Spring	In this course students will learn and understand new knowledge of recent application of the science and technology in aquatic micro and macro organisms and their life habitat, genetic selection and bioengineering and their products that benefit us such as novel therapeutics, biofuels and pharmaceuticals. Course subjects are: -History of aquatic biotechnology research -Introduction of major areas of aquatic biotechnology -Algae: Biofuels, food, cosmetic products	Assoc. Prof. Dr. İ. Tülay Çağatay	Yes
4	Basic Sciences Division <i>Temel Bilimler</i>	ESÜM 111	4	Bacterial Diversity in Marine Ecosystem	Spring	In this course, students learn general properties, morphology and phylogeny of marine bacteria, bacterial interactions with their biological and physico-chemical environment in marine, bacterial diversity in marine ecosystems. They will also learn identification of marine bacteriology, culturable and unculturable marine microbes and their genetic diversity, special bacterial groups in extreme habitats, halophiles, thermophiles, volcanic marine bacteria, Arcttic bacteria, Archeas phototrophic marine bacteria, Algae, and microbial symbioses. Assessment: Includes practical and project works.	Assoc. Prof. Dr. İ. Tülay Çağatay	Yes
5	Basic Sciences Division <i>Temel Bilimler</i>	ESÜM 112	4	Genetics	Spring	Course contents are basic Mendel rules, genotype and fenotype, genes and alleles, status of full dominancy, genetic elements in the cell, cell divisions, meiosis, mitosis and fertilization, structural and numerical chromosome differences, mutation, population genetics, fish breeding, and transgenic aquatic animals. Students will learn the basic principles genetics to apply the in their field.	Assoc. Prof. Dr. İ. Tülay Çağatay	Yes