

2017-2018 ACADEMIC YEAR LIST OF COURSES AT DEPARTMENT OF FISHERIES ENGINEERING

COURSES LIST of “MASTER of SCIENCE” DEGREE							
Course Code	Credits	Course Title	Winter Semester	Spring Semester	General Contents	Contact Details of Lecturer	Department
ESÜM 115	4	MOLECULAR BIOLOGICAL APPROACH IN FISHERIES AND AQUATIC SCIENCES	X	X	Introduction to molecular biology, structures of amino acids, nucleotids and nucleic acids, structures of prokaryotics and eukaryotic DNA and RNA, RNA types, Miteochondrial DNA, vectors, plasmid, and bacteriophages, gene isolation and cloning, recombination and DNA repair mechanisms, DNA replications, transcription and translations and protein synthesis.	Assoc. Prof. Dr. İ. Tülay ÇAĞATAY E-mail: tulaycagatay@akdeniz.edu.tr Tel: +9 0 242 310 6089	Institute of Science and Technology Department of Fisheries Engineering
ESÜM 116	4	MOLECULAR BIOLOGICAL AND GENETICAL TECHNIQUES IN FISHERIES AND AQUATIC SCIENCES	X	X	Application of molecular biological tehniques in Fisheries and Aquatic sciences, introduction of laboratory instruments, purifications of DNA and RNA from different tissues, isolation of plasmids, recombinant DNA technologies, PCR, agarose gel electrophoresis, restriction endonucleases, cloning technologies, production of cDNAs, application of RFLP, Real time PCR, Western and Northen Blots, primer dizayn, DNA sequencing, International database in molecular biology and their application.	Assoc. Prof. Dr. İ. Tülay ÇAĞATAY E-mail: tulaycagatay@akdeniz.edu.tr Tel: +9 0 242 310 6089	Institute of Science and Technology Department of Fisheries Engineering
ESÜM 117	4	ADVANCED MICROBIOLOGY	X	X	In this course, student will learn; the classification of water microorganisms, prokaryotes (archaea, cyanobacteria and bacteria), eukaryotes (algae, protozoa, fungi) and viruses, bacterial physiology and metabolism, marine and fresh water microorganisms, agents of waterborne diseases, nutrient cycles of microorganisms, waste water microbiology, bioremediation and microbial mining.	Assoc. Prof. Dr. İ. Tülay ÇAĞATAY E-mail: tulaycagatay@akdeniz.edu.tr Tel: +9 0 242 310 6089	Institute of Science and Technology Department of Fisheries Engineering