



**T.C.**  
**Akdeniz University**  
**Faculty Of Fisheries**  
**Department Of Aquaculture Engineering Department**  
**Course Contents**

**3.CLASS SPRING**

<b>Lesson Code</b> : SUM 340	<b>Lesson Name</b> : Genetic	<b>T+U</b> : 2+2	<b>Credit</b> : 3	<b>ECTS</b> : 2
<b>Content of the Course :</b> Course contents are Mendel rules, genotype and fenotype, genes and alleles, status of full dominancy, genetic elements in the cell, cell divisions and fertilization, structural and numerical chromosome differences, mutation, and population genetics.				
<b>Lesson Code</b> : SUM 364	<b>Lesson Name</b> : Introduction to Fisheries Marketing	<b>T+U</b> : 2+0	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Marketing essentials				
<b>Lesson Code</b> : SÜM 328	<b>Lesson Name</b> : Seafood Safety and Quality Control Systems	<b>T+U</b> : 2+0	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Food quality, quality control, quality assurance systems, HACCP principles, HACCP applications				
<b>Lesson Code</b> : SUM 334	<b>Lesson Name</b> : Computer Applications in Fisheries	<b>T+U</b> : 2+0	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Programs such as spss11, corel draw, excell, primer used in fisheries management and population studies				
<b>Lesson Code</b> : SUM 374	<b>Lesson Name</b> : Semester Internship	<b>T+U</b> : 0+2	<b>Credit</b> : 1	<b>ECTS</b> : 2
<b>Content of the Course :</b> Presentation of aquarium fisheries and economic dimension, Teaching of CV preparation techniques, Techniques of alternative cultivation techniques and definition of environmental conditions, Effects of acidic or basic properties of waters on fish and effects of these changes on fish health to be informed about the breeding facilities of the hatchery and production ponds in the trout facilities, sea fish production, gene transfer in fish and information about the studies carried out in this way. To give information to the students about the expected benefits, risks, legal and ethical risks in aquaculture and to answer questions, suggestions and answers.				
<b>Lesson Code</b> : SUM 443	<b>Lesson Name</b> : Alternative Fish Culture	<b>T+U</b> : 2+0	<b>Credit</b> : 3	<b>ECTS</b> : 2
<b>Content of the Course :</b> Introduction, alternative new species, new species recommendations for sustainable aquaculture, frog farming, pangasius farming, snail cultivation, doctor fish breeding, anatolian minnow farming, shabout farming, the importance of herbivor and omnivorous species for sustainable cultivation.				
<b>Lesson Code</b> : TDP-300	<b>Lesson Name</b> : Social Support Projects in Fisheries	<b>T+U</b> : 1+2	<b>Credit</b> : 2	<b>ECTS</b> : 4
<b>Content of the Course :</b>				
<b>Lesson Code</b> : SUM 376	<b>Lesson Name</b> : Vocational Practice	<b>T+U</b> : 0+2	<b>Credit</b> : 1	<b>ECTS</b> : 2
<b>Content of the Course :</b> Introduction to aquarium fisheries and economic aspects, to teach the techniques of CV preparation, Frog breeding techniques and environmental conditions, identification of the effects of acidic or basic properties of fish on fish and the effects of these changes on fish health informing students, how to make trout production, eggs, larvae and inform about trout production in trout facilities, knowledge about the characteristics of hatcheries and production ponds in trout facilities. To give information to the students about the expected benefits, risks, legal and ethical risks in aquaculture and to answer questions, suggestions and answers.				
<b>Lesson Code</b> : SUM 438	<b>Lesson Name</b> : Biodiversity and Conservation	<b>T+U</b> : 2+0	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Biodiversity in history, What is Biodiversity?, species diversity, genetic diversity, ecosystems diversity, Importance of biodiversity, Biodiversity and sustainability, Biodiversity and alien species, Global climate change and biodiversity, Biodiversity and endangered species, human activities affecting biodiversity, Biodiversity conservation, national strategy and action plan on biological diversity in Turkey, Biological diversity in turkey				

<b>Lesson Code</b> : SUM 302	<b>Lesson Name</b> : Fishing Vessels Equipments	<b>T+U</b> : 1+2	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Description of fishing boat, classification of fishing vessel according to fishing methods, deck equipments and fish finder equipments according to fishing operations, maintenance of fishing boats and fish boats planning were consist of contents of course.				
<b>Lesson Code</b> : SUM 304	<b>Lesson Name</b> : Plankton Culture	<b>T+U</b> : 1+2	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Production of cultured micro algae, their general properties, production methods for feeding and enrichment of rotifera and artemia sp which are used as live feed. Importance of algae culture, culture environments, the introduction of materials used. Properties of cultured micro algae and environmental conditions in aquaculture. Fattening locations used in the production of micro algae and their preparation and use. Micro algae production techniques. Production steps from test tubes to intense production. Cell counting in micro algae. Conservation of algal cultures. Production techniques of some micro algae and their production in laboratory				
<b>Lesson Code</b> : GNC-300	<b>Lesson Name</b> : Volunteering Studies in Fisheries	<b>T+U</b> : 1+2	<b>Credit</b> : 2	<b>ECTS</b> : 4
<b>Content of the Course :</b>				
<b>Lesson Code</b> : SÜM 206	<b>Lesson Name</b> : Net Construction and Netting Technology	<b>T+U</b> : 2+2	<b>Credit</b> : 3	<b>ECTS</b> : 2
<b>Content of the Course :</b> Characteristics of the fishing nets used in fisheries sector, designing of cage culture and fishing gear, methods of net cutting, the hanging ratio, knotting techniques of fishing net				
<b>Lesson Code</b> : SUM 306	<b>Lesson Name</b> : Marine Fish Culture	<b>T+U</b> : 2+2	<b>Credit</b> : 3	<b>ECTS</b> : 2
<b>Content of the Course :</b> Course Content Fish farming definition, purpose and significance. Production statistics, the situation of fish farming in Turkey, marine fish farming and its future potential. Farming of the major marine fish and marine fish farming, the production techniques used in the rearing systems (pool, ağkafes, weirs, lagoons, etc.) presentation. Hatchery design, supply of broodstockfish, brood fish, egg retrieval, egg incubation, live feed(phytoplankton and zooplankton) production and use of larval feeding. Caring-feeding larvae and juvenile periods. Stages in the production of market size fish (the stocking of fish in cages or pools, fish in the classification according to their size, feeding calculations, feeding patterns, networks, maintenance, etc.). Market size fish harvesting, packaging and marketing. Transportation of live fish. Information about the health of fish in aquaculture and the environment.				
<b>Lesson Code</b> : SUM 322	<b>Lesson Name</b> : Feeds Information	<b>T+U</b> : 2+0	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Introduction, biodiversity of feed raw materials, classification of feed raw materials, feed raw materials of plant origin, animal feed raw materials, feed additives, feed nutrients and toxic substances, feeds and varieties, feed analysis methods				
<b>Lesson Code</b> : SUM 326	<b>Lesson Name</b> : Internship	<b>T+U</b> : 0+2	<b>Credit</b> : 1	<b>ECTS</b> : 2
<b>Content of the Course :</b> Inland water and marine fish farming companies, marine hatcheries, Aquarium fishes, feed mills, processing plants, fishing vessels, fisheries, fisheries, water treatment plants, food analysis laboratories, aquaculture faculties, fisheries research institutes etc internship places				
<b>Lesson Code</b> : SUM 308	<b>Lesson Name</b> : Planning of Aquaculture Facility	<b>T+U</b> : 2+0	<b>Credit</b> : 2	<b>ECTS</b> : 2
<b>Content of the Course :</b> Project concepts, fish hatcheries, fish farms and their components. Species and site selection. Stages of project planning and formal application to establish procedures to be followed				
<b>Lesson Code</b> : SUM 310	<b>Lesson Name</b> : Fish Diseases	<b>T+U</b> : 2+2	<b>Credit</b> : 3	<b>ECTS</b> : 2
<b>Content of the Course :</b> Fish, anatomy, definitions, predisposing factors, contagious diseases, non-contagious diseases, bacterial fish diseases, viral fish diseases, fungal fish diseases, parasitic fish diseases, diagnosis, identification, treatment methods, laboratory applications				