

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

3.CLASS FALL

Lesson Code: SUM 377 | **Lesson Name**: Semester Internship | T+U: 0+2 | Credit: 1 | ECTS: 2

Content of the Course:

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.

Lesson Code: SUM 321 | **Lesson Name**: Aquatic Pharmacology | T+U: 2+0 | Credit: 2 | ECTS: 3

Content of the Course :

Fish, water, health, disease, hygiene, treatment, antimicrobial, antibiotic, disinfectan, sterilization, disinfection, treatment applications, counts

Lesson Code: SUM 319 | **Lesson Name**: Marine Aquariums and Breeding | T+U: 2+0 | Credit: 2 | ECTS: 3

Content of the Course:

Definition of aquarium, equipment, installation, living things and maintenance of aquarium, environmental conditions, heating, illumination, feeding, city aquariums, projecting

Lesson Code: SUM 437 | **Lesson Name**: Aquatic Vertabrates | T+U: 2+0 | Credit: 2 | ECTS: 3

Content of the Course:

Knows Aquatic vertebrates, general characteristics of Vertebrata, Reproductive systems, Tetrapoda and Amphibia importance, Biological characteristics, Nutrition, Sense organs, Reproductive systems, Classification, General characteristics of aquatic reptiles, Aquatic birds, Aquatic mammals

Lesson Code: SUM 435 | **Lesson Name**: Fish Releasing in Inland Waters | T+U: 2+0 | Credit: 2 | ECTS: 3

Content of the Course:

Inland fisheries and stocking, stocking the importance and strategy, basic principles for a successful stocking and the effects on biodiversity, in fish used species, stocking the purpose and the available species,

Lesson Code: SUM 379 | **Lesson Name**: Vocational Practice | **T+U**: 0+2 | **Credit**: 1 | **ECTS**: 2

Content of the Course:

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.

Lesson Code: SUM 313 | **Lesson Name**: Fishing of Inland Water Fishes | T+U: 2+0 | Credit: 2 | ECTS: 3

Content of the Course:

Ethical principles, ensuring personal safety during operations, recognizing fishing equipments technique to distinguish the target species fisherman, fishing regulations, fishery management in freshwaters

Lesson Code: SUM 305 | **Lesson Name**: Fisheries Mechanization | T+U: 2+0 | Credit: 2 | ECTS: 2

Content of the Course :

Definition of mechanization, Classification of mechanization tools in aquaculture, Fish breeding history and importance of mechanization, energy sources. Engines used in the transmission of water, water filtration, water pools discharge biofiltreler mechanization, mechanization of air conduction and oxygenated, water heating and cooling mechanization, mechanization of feeding, cage systems and mechanization.

Lesson Code: SÜM 303 | Lesson Name: Fishing Equipments and Fishing | T+U: 2+2 | Credit: 3 | ECTS: 4

Content of the Course:

Classification and properties of mesh, Extension nets and their hardware, Criteria to be considered in equipment, Purse and fisheries

Lesson Code: SÜM 301 | **Lesson Name**: Ornamental Fish Culture | **T+U**: 1+2 | **Credit**: 2 | **ECTS**: 3

Content of the Course:

Current situation of aquarium sector, aquarium equipment and system design, management and maintenance of aquarium system, water quality and management, aquarium fish species, biological properties of aquarium fish, culture, feed and feeding of fish. In addition, the design of the aquariums and ornamental ponds, recirculating aquaculture system and management.

 Lesson Code: SÜM 311
 Lesson Name Preservation
 Innovative Techniques in Seafood
 T+U: 2+0
 Credit: 2
 ECTS: 3

Content of the Course:

Minimal processing techniques, high pressure applications, pulsed electric field, irradiation, new packaging techniques

Lesson Code: SUM 309 | **Lesson Name**: Freshwater Fish Culture | T+U: 2+2 | Credit: 3 | ECTS: 4

Content of the Course :

Introduction, importance of fresh water sources, natural productivity and using possibilities, factors effecting on the rearing of aquatic products, culture techniques of freshwater fishes such as trout, carp, tilapia, eel, bullhead etc. in which their economical importance, systematic and biological properties, environment and water desires, reproduction biology, hatchery techniques, culture systems such as pond-cage, improvement methods and biotechnological practices, nutrition and feeding, harvest, transportation and marketing

Lesson Code: SUM 307 | **Lesson Name**: Seafood Processing Technology I | T+U: 2+2 | Credit: 3 | ECTS: 4

Content of the Course:

Composition of seafood flesh (water, proteins, lipids, vitamins, minerals, changes in quality of seafood, postmortem changes (rigor mortis, microbial changes, chemical changes, enzymatic changes, sensory changes) products processing technologies (refrigeration technology