

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

## 1.CLASS SPRING

Lesson Code: SUM 114 | Lesson Name: Ecology | T+U: 2+0 | Credit: 2 | ECTS: 4

## **Content of the Course:**

The interactions of organisms with their environment, historical development of ecology, relationship with other disciplines and the use of the field of fisheries, ecology. the basic theory, concepts and general principles of ecology; impact of abiotic factors and biotic factors (nutrition, intra-species and cross-species biological relations) on living things, the structural characteristics of the population, population dynamics, the importance of the use of living resources; community types and properties (species diversity, natural selection, the food chain, food web, ecological pyramids, etc.); elements of ecosystems, energy transfer and material cycles (carbon, oxygen, nitrogen, phosphorus, sulfur, cycles of other elements); Earth's major ecosystems (terrestrial, freshwater, marine ecosystems); sustainable use of natural resources, pollution prevention and conservation of biodiversity.

Lesson Code: SUM 112Lesson Name: Material CognisanceT+U: 2+0Credit: 2ECTS: 2

#### Content of the Course:

Information about materials used in fisheries sector, type of protection methods for materials used in fisheries sector

**Lesson Code**: SUM 136 | **Lesson Name**: First Aid and Diving Technique | T+U: 1+2 | Credit: 2 | ECTS: 3

# **Content of the Course:**

Scuba's definition, equipment, diving physics, anatomy and physiology, diving training, diving planning, diving table calculations

Lesson Code: YBD 102Lesson Name: English IIT+U: 2+0Credit: 2ECTS: 4

# **Content of the Course:**

In this course, students gain the abilities to understand and apply familiar and common expressions and basic sentences for the satisfaction of basic needs; to introduce oneself to others and to ask and reply to questions on personal details such as where he/she lives, people he/she knows and things he/she possesses; to respond in a simple manner, provided the other party speaks slowly and clearly and is prepared to help.

**Lesson Code**: TDB 102 | **Lesson Name**: Turkish Language 2 | T+U: 0+0 | Credit: 2 | ECTS: 2

# **Content of the Course:**

The sentence structures in Turkish and examples of usages contrary to these structures, comprehension-expression practics, general features of writing types.

**Lesson Code**: SUM 110 | **Lesson Name**: Engineering Mechanics | T+U: 2+0 | Credit: 2 | ECTS: 2

# **Content of the Course:**

Forces in plane and space; force, moment and balance; concepts of mass and weight; center of gravity and centroid; some carrier systems; calculation of bar forces.

**Lesson Code**: SUM 102 | **Lesson Name**: Aquatic Plants | T+U: 2+2 | Credit: 3 | ECTS: 4

### **Content of the Course:**

Describe the role and importance of the macroalgae (Chlorophyta, Phaeophyta, Rhodophyta) and fanerogam (Magnoliophyta) living in marine and inland waters in the ecosystem, their general characteristics, reproduction, classification, usage areas and endangered species. In land and laboratory applications; The methods of collecting macro and micro aquatic plants, Cyanophyta, Chlorophyta, Euglenophyta, Pyrrophyta, Chrysophyta, Phaeophyta, Rhodophyta Cyanophyta

**Lesson Code**: ATA 102 | **Lesson Name**: Atatürk's Principles and History | **T+U**: 0+0 | **Credit**: 2 | **ECTS**: 2 |

#### Content of the Course:

Abolition of Sultanate, Declaration of Republic ,Abolition of Caliphate ,Political Movement and Parties ,Juridical Revolution ,Revolution in the Field of Education and Culture ,Social Revalutions ,Turkish Foreign Policy in the Period of Atatürk ,Principles of Atatürk

**Lesson Code**: SUM 104 | **Lesson Name**: Technical Drawing | T+U: 1+2 | Credit: 2 | ECTS: 3

## **Content of the Course:**

Definition of technical drawing, The importance, its interest in the profession picture, painting tools, use. Picture papers, sizes; Folding arrangement, drawings, lines, use of lines, scales. Principles of perpendicular dots, subtraction To make a third appearance from two principal views, freehand drawing techniques. Three dimensional drawing techniques; simple shapes, inclined surfaces, uneven surfaces. Principles of measurement. Principles of sectioning; full and half sections.

**Lesson Code**: SUM 108 | **Lesson Name**: Strength of Materials | T+U: 2+0 | Credit: 2 | ECTS: 2

## **Content of the Course:**

Beams; internal sectional effects in beams; normal force, shear force and bending moment diagrams; analysis and design of beams; sprain; column design.

Lesson Code: SUM 106 | Lesson Name: Mathematics IIT+U: 2+0 | Credit: 2 | ECTS: 2

## **Content of the Course:**

Concept of indefitine integration, Integration techniques, Definite integral, Fundamental theorems of definite integration, Numerical integration, Improper integrals, Finding area and length of a curve, Evaluating volume and area of surface, Technical applications of integration, Sequences and series and convergence tests