

## **DIALYSIS PROGRAM**

### **1st Semester**

#### **Dialysis I 6 ECTS**

Physiological principles of hemodialysis; Dialysis solutions; Water treatment system; H. D. Device; Indications for dialysis; Acute and chronic dialysis, H.D. application; Heparin administration, TMP adjustment; H. D. termination of the process; H. D. vein access passages for M. complications, H.D. MG. complications and treatments applied, P.D. Tools, materials and materials used with physiological principles; P. D. teams and duties, P.D. surgical complications related to catheter placement after implantation; Complications related to peritoneal catheters; P. D. patient selection criteria and patient education; Sufficiency in the treatment of peritoneal dialysis; Non-infectious complications and treatment in peritoneal dialysis; Characteristics and complications of hemodialysis in children; Peritoneal dialysis and complications in children.

#### **Nephrology 6 ECTS**

The diseases related to the urinary system, especially diagnosis and treatment methods of chronic renal failure, hemodialysis, peritoneal dialysis and kidney transplantation.

#### **Introduction to Anatomy 3 ECTS**

To give information about the anatomical structure and properties of human body.

#### **Biochemistry 3 ECTS**

The aim of this course is to acquaint the students with the concepts of molecules, biochemical and cellular mechanisms that are important in maintaining the homeostatic balance of the body, the basic properties of carbohydrate, lipid and amino acid metabolisms, how they reflect the biochemical components of various body fluids of pathological deviations in disease states.

#### **Medical Terminology 3 ECTS**

With this course, students will be able to understand the meanings, They will be able to easily understand and use these terms in their professional and everyday life.

#### **OccupationAL Ethics 3 ECTS**

This course will help students learn about the ethical concept and health professional ethics and find solutions to the problems they face in their professional life.

#### **Atatürk's Principles and History of Turkish Revolution I 2 ECTS**

Teaching the military, political, economic and social events of the Ottoman Empire in the internal and external politics, the struggle for national liberation and the formation of the new Turkish Republic.

## **English I 2 ECTS**

Students will understand English effectively and use basic grammar of English Rules. Through this course, students will be able to interpret simple dialogues in English and use the new structures and words they have learned in their daily lives.

## **Turkish Language I 2 ECTS**

To give information about language definition, role and importance in communication, verbal and written expression techniques in literary and scientific fields, writing rules and expression disorders.

## **2nd Semester**

### **Usage, Maintenance and Applications of Dialysis Equipment I 10 ECTS**

Dialysis System Equipment; Water treatment systems; Reversible osmosis systems, Dialysis equipment; Key features of the dialysis machine; Dialysis machine fluid circuit, Single needle dialysis systems, Hemofiltration and hemodialysis basic features, Na and UF profiles, Dialysis machine disinfection systems will be processed.

### **Sterilization Principles and Methods 5 ECTS**

Asepsis, Antisepsis, Disinfection, knowing sterilization concepts, providing sterilization for operating room and instruments, Stabilizing sterilization, Preventing infection in the operating room.

### **Dialysis II 6 ECTS**

Slow and continuous H.D. Methods; Hemoperfusion and dialysis in plasmaphoresis-poisoning; Dry weight concept; The Resürkilasyo; Reuse of dialyser in elderly patients; Cardiovascular problems (K.A.H.Peritardite, Endocarditis); GIS Issues; Dialysis Amyloidosis Carpal Tunnel Syndrome; Osteoarthropathy in peripheral joints; Spondylarthropathies; Metabolic and endocrine problems, H.D. (cancer, acquired renal cystic disease, impotence, sexual dysfunction in women, fertility control and pregnancy dialysis, pulmonary edema and pleural effusion, tuberculosis).

### **Physiology 3 ECTS**

Introduction to human physiology, tissue and systems, homeostasis, Muscular System, Nervous System, Cardiovascular System, Blood and Immune system, Respiratory System, Sensory System, Digestive System, Urinary System, Endocrine System and Reproduction

### **Atatürk's Principles and History of Turkish Revolution II 2 ECTS**

This course examines Atatürk's principles and reforms and the political developments after the Ataturk with the establishment process of the Republic of Turkey.

## **English II 2 ECTS**

Students will be able to understand English, use it effectively and compare basic grammar rules of English. Through this course, students can comment on simple dialogues in English and use the new structures and words they have learned in their daily lives.

## **Turkish Language II 2 ECTS**

Proper use of punctuation marks in writing, development of plain text writing skills, listening and reading skills are taught.

## **3rd Semester**

### **Pharmacology 4 ECTS**

In this course, basic pharmacological concepts, specific mechanisms of drug action and the system will be discussed.

### **Usage, Maintenance and Applications of Dialysis Equipment II 10 ECTS**

To give information about how to make hemodialysis procedure from the technical side, To provide general information about standard systems and materials required to perform hemodialysis process. To gain knowledge and skill about standard systems and dialysis consumable materials in hemodialysis center.

### **Infectious Diseases and Microbiology 5 ECTS**

Introduction to Infection Diseases, General Information; Digestive System Diseases, Food Poisoning (S.Aureus), Botulismus, Typhoid, Paratyphoid, Salmonella Gastroenteritidis, Shigella, Cholera; Respiratory Diseases, Diphtheria, Mumps, Influenza, Whooping Cough, Bacterial pneumonias, Tuberculosis, Measles, Chickenpox; Infectious diseases transmitted by skin and mucous membranes Gonorrhoea, Herpes Simplex Rabies, Tetanus, Syphilis, Meningitis-Hepatitis-Aids, Parasitic Infections; Urinary System Infections; Catheter Infections; Hospital infections; Methods of combating infectious diseases.

### **First Aid 3 ECTS**

First aid entry and general characteristics, evaluation of basic life function, respiratory and circulatory system, first aid injury, bleeding in first aid, shock and first aid, burns and first aid, poisoning and first aid, fracture-dislocations and sprains first aid, basic life support

### **Compulsory internship 5 ECTS**

The professional knowledge gained at the school, students will receive internships during the thirty working days at the end of the 2nd semester to ensure that they acquire new practical and technical

skills, to acquire business skills, and to communicate effectively with other disciplines and administrators.

### **Stress Management 3 ECTS**

To learn basic concepts about crisis and stress, what to do and how to do in crisis environment to teach that it should be managed, to be aware of stress control

## **4th Semester**

### **Peritoneal and Advanced Dialysis 5 ECTS**

Teaching dialysis methods

### **Nutritional Principles in Dialysis Patients 4 ECTS**

It is aimed to learn the basic concepts of nutrition, nutrient groups and their properties, nutritional principles and nutritional requirements in various physiological periods, some health problems related to nutrition and nutritional treatments.

### **Mental Health in Dialysis Patients 4 ECTS**

Basic concepts related to mental health are health, illness, mental health, body image, hope-harmony, self-recognition, behavior, attitude, personality development and personality disorders, culture and psychiatry, death, chronic illness and family, organ donation and psychosocial approaches, psychiatric problems in dialysis patients, aims to provide information on home care topics

### **Basic Professional Skills 5 ECTS**

Students are aimed to acquire various skills that they will use in the clinic.

### **Patient Care Principles 4 ECTS**

Human and basic requirements; Health and disease concepts; Health team, safe hospital environment; Vital signs, fever, measurement and recording of respiration; Hot cold applications; Individual hygiene and care, hair, mouth and face care; Deep duties, bedside patient care, morning toilet, bed rest, decubitus formation and treatment, bedding, rotation of the patient in the bed; Catheters and probes used in uriner system applications will be processed .

### **Rational Drug Use 3 ECTS**

Students; the most accurate, feasible and safe medicines or medicines for the preparations for use in combination with appropriate dosages and dosages

### **Vocational English 2 ECTS**

To study the basic concepts of professional English in Health Management,

improve understanding skills, contribute to writing and speaking skills.

### **Sign language 3 ECTS**

To learn the sign language used by hearing impaired individuals and to teach and to use this language when needed in social life.