

ANESTHESIA 2024-2025 COURSE CONTENTS

FIRST CLASS - SEMESTER I

ATA104 HISTORY of The TURKISH REPUBLIC I

(2+0), AKTS:2

The basic concepts, Reasons for the collapse of the Ottoman State, Modernization movements in Turkey, First World War, National Independence War.

FAR105 BASIC PHARMACOLOGY

(2+0), AKTS:3

Introduction to pharmacology and basic concepts, pharmacokinetics, pharmacodynamics, central nervous system drugs, autonomic nervous system drugs, cardiovascular system drugs, analgesics, antiinflammatories, general anesthetics, local anesthetics, preanesthetic medication, Central Nervous System Drugs, Drug abuse and addiction, Respiratory System drugs, Gastrointestinal system, Premedication, Endocrine System Drugs, Toxic effects of drugs, Drug Administration Routes.

ANE101 PROFESSIONAL APPLICATIONS OF ANESTHESIA

(2+0), AKTS:9

History of Anesthesia. Anesthesia Technician Duties and Responsibilities. Laboratory Rules. Safety precautions in the operating room, Sterile working conditions-Sterilization \ Disinfection - Cleaning of materials, Vital Findings 5 Drug Administration Routes 6 Drug Administration Routes, Intravenous Fluid Infusion and Blood Collection-Venous, arterial, capillary blood collection, Intravenous Fluid Infusion and Blood Collection-Venous, arterial, capillary blood collection, Preparation of drugs used in general anesthesia -Drug preparation/Dilution, Patient Monitoring and Monitoring, Patient Monitoring and Monitoring, Recognition and preparation of anesthesia device and circuits - Preparation of anesthesia room, Prevention of hypothermia, Ensuring airway patency.

MYO003 MEDICAL TERMINOLOGY

(2+0), AKTS:2

Pronunciation of terms, Prefixes, Suffixes, Term types, Movement system, Blood terms, Cardiovascular system terms, Respiratory system terms, Digestive system terms, Urinary system terms, Genital system terms, Endocrine system terms, Nervous system terms and psychiatry terms, Sense organs terms, diagnostic terms.

INGU104 ENGLISH I

(2+0), AKTS:2

This is an elementary English course designed for beginners of English language. The learners are expected to develop four basic language skills; listening, speaking, reading and writing through various kinds of teaching techniques and practices. The learners are exposed to basic language structures and vocabulary with the help of authentic materials within real life context.

MYO101 BASIC ANATOMY AND PHYSIOLOGY

(2+0), AKTS:4

Introduction to Anatomy and Physiology and short terminology, Axes, planes, Terms of location and direction; general information, Cell Theory, Structural features, Cell organelles, Cell division; Substance exchange, Metabolism, Locomotor System Anatomy and Physiology-Osteology, Locomotor System; arthrology; General information, joint types, movements. myology; Anatomy, Contraction mechanism,

Striated muscles, cardiac muscle, smooth muscle physiology. Respiratory system Anatomy and Physiology. Nose, Paranasal sinuses, Larynx, trachea, Lungs. Physiology of Respiratory, ventilation, diffusion, Perfusion, Respiratory Regulation. Heart-Circulatory System Anatomy and

Physiology. Blood: functions, components, formed elements of blood, Blood groups. Metabolism of the heart, heart sounds. Heart cavities, vessels. Digestive system Anatomy and Physiology I. Oral anatomy, Chewing muscles, Pharynx, Oesophagus, Stomach, Small-large intestines, Kc. Gallbladder, Pancreas, Digestive glands. Digestive System II. Digestion in the mouth, stomach, digestion in the small and large intestines. KC. functions, CHO digestion, Digestion of fat-proteins. Vitamin-Mineral-Electrolyte functions. Urinary System Anatomy and Physiology. Function of kidneys, nephron, urin formation, fluid-electrolyte balance. Distribution of water in the organism, Electrolytes-acid-base balance. Renin-angiotensin system. Genital organs-reproductive physiology. Female and male genital organs. Hormonal control of the reproductive system, hypothalamus, pituitary, gonadotropic hormones. Ovarian hormones, reproductive cycle. Endocrine system anatomy and physiology. Endocrine glands, their functions. Physiological functions of hormones, classification. Hormones and target cells. Nervous system Anatomy and Physiology. Development of nervous tissue, neuron, neuron types, functions, synapse, neuroglia cells. FAQ and PSS . Sense organs, Anatomy and Physiology. Ways of seeing, ways of hearing and balance.

TURK104 TURKISH LANGUAGE I

(2+0), AKTS:2

The course will help students to gain consciousness of language; inclination and habit of reading; proper usage of fundamental spelling and punctuation; and to gain a larger vocabulary set utilization.

RKUL103 UNIVERSITY CULTURE I

(0+2), AKTS:4

14 seminars will be held throughout the week, conferences, panels, workshops and singing Includes've frame Academics at the university, student council it recommends a program of student clubs of hisera.

RPSI209 POSITIVE PSYCHOLOGY AND COMMUNICATION SKILLS

(2+0), AKTS:2

Definition and Basic Concepts of Positive Psychology: Science of Happiness, Multiple Intelligences, Neuromanagement and the Relationship of Multiple Intelligences, Brain Infrastructure of Social Behaviors, Mind-Based Education Theoretical Foundations of Positive Psychology: To consider the suitability of the individual with his biological nature in the solution of problems, to teach and learn the basic values of protective mental health, to present examples where brain-based education and values education overlap. Introduction to Social Cognitive Neuroscience-Cerebral Infrastructure of Social Behaviors: Socioemotional experience and behavior, examining the brain-behavior systems studied within the cognitive sciences. Applications of Positive Psychology Emotional Intelligence – Emotional Intelligence in Adults, Children and Young People, Marriage and Business Life: Intelligence, Emotional Intelligence, Principles of Emotional Intelligence, Emotional Intelligence's Relationship with Personality Development, Marriage and Business Life. Self-Knowledge and Awareness: “To enable the person to recognize himself, his feelings, thoughts and behaviors, to deal with the concepts of insight definition, recognizing and shaping his interests, abilities and values. Recognition of Others and Empathy: How the person perceives the people, events, approaches and processes in the environment; Explaining the concepts of determining and defining expectations,

developing realistic expectations for himself and his environment, grasping the point of view of the other person, developing sensitivity to the feelings of others, developing the skills to understand others better. Communication Skills: To be able to learn and apply communication skills, to be able to recognize their own feelings and thoughts, to gain the ability to express them

in a healthy way, to use the I language, to use the skill of "Saying No", which is one of the skills that is important for maintaining our relations, on time and in place. Processing the concepts of learning verbal and nonverbal communication skills. Motivation and Planning: To be able to mobilize oneself to achieve one's goals, to develop a sense of responsibility, to focus on the target, to direct attention to the target, to act less impulsively, to have more self-control, to develop target-oriented strategies, to realize the values that are important to them, to achieve abstract and concrete goals. Processing the concepts of determining their own Future plans by making a distinction, gaining the skills of determining healthy decision-making steps about their future. Problem Solving Skills: Identifying stressful situations, developing strategies for their solutions, studying relaxation methods, positive-negative thinking, developing the ability to analyze and understand social relationships, developing positive peer relationships, increasing the ability to compromise in problem situations, solving relationship problems better, extrovert Teaching the concepts of cohesion, sharing, cooperation and teaching to be democratic in relationships. Anger, Aggression and Violence: : Definitions of anger, aggression, violence, recognizing anger and stress reactions, working on methods of coping with stress, gaining experience in coping with a stressful situation with role-playing method and understanding the benefits of positive thinking in stressful situations; Processing the concepts of developing the ability to use time correctly, with quality and target-oriented. Relationship Management: Explaining the concepts of communication, communication levels and types of relationships, the concept of awareness, knowing oneself and others, emotion management, the concept of responsibility, managing the emotions of others, Persistence: Processing the concepts of gaining the skills of controlling impulses, applying the decisions taken, being patient, not giving up the work / task that has been decided, making effort for the continuation and continuity of the work. Healthy Decision Making: Neurobiological basis of decision making, decision making theories, stages of decision making, decision making styles, processing of factors affecting decision making. Compromise: Explaining the concepts of defining the situation that caused the conflict, determining the wishes and needs of both parties, creating proposals by considering mutual needs, choosing the solution proposal that is suitable for both parties, determining who will do what in the solution decided, and division of labor.

FIRST CLASS - SEMESTER II

ATA104 HISTORY of The TURKISH REPUBLIC II (2+0), AKTS:2

Events in the genesis and development of modern Turkey, ideas and principles; Turkish Foreign Policy in Atatürk Era, Ataturk's Revolutions, The Basic principles of Turkish Revolution.

RKUL104 UNIVERSITY CULTURE II* (USEC) (0+2), AKTS:4

14 seminars will be held throughout the week, conferences, panels, workshops and singing Includes've frame Academics at the university, student council it recommends a program of student clubs of his era.

INGU104 ENGLISH II (2+0), AKTS:2

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TURK104 TURKISH LANGUAGE II (2+0), AKTS:2

The course will help students to gain consciousness of language; inclination and habit of reading; proper usage of fundamental spelling and punctuation; and to gain a larger vocabulary set utilization.

ANE106 SYSTEM DISEASES I

(2+0), AKTS:5

General Disease Information, Circulatory System Diseases, Respiratory System Diseases, Infectious Diseases, Blood Diseases, Urogenital System Diseases, Genetic Diseases,

ANE118 ANESTHESIA APPLICATIONS I

(2+2), AKTS:9

Introduction to Anesthesia, Anesthesia Device and Equipment, Anesthesia Device Maintenance, Patient Monitoring, Airway and Equipment, Airway Management and Intubation, Premedication and Medications, In Anesthesia, Induction and Maintenance, PACU, Oxygen Therapy, Basic and Advanced Life Support

ANE100 REANIMATION

(2+0), AKTS:5

Definition of Reanimation and ICU, Recognition Lecture Notes, Source Book, Approach to Respiratory Failure in Reanimation, Tools and Equipment Used in Reanimation and ICU. Lecture Notes, Source Book, Aspiration Pneumonia, ICU Patient Monitoring, Approach to Pain and Painful Patient, Induction in ICU , Fluid-Electrolyte Replacement, Blood And Blood Product Transfusion, Shock And Its Types, Brain Death And Coma, ICU Pressure Sore, Protection From Ybu Pressure Sores

SECOND CLASS - SEMESTER III

ANE219 ANESTHESIA APPLICATIONS II

(2+0), AKTS:6

Evaluation of the patient before general anesthesia, material and patient preparation, monitoring of patient positions, anesthesia induction, airway patency, endotracheal intubation, alternative airway methods, central catheterization, maintenance of general anesthesia, monitoring of general anesthesia, termination of general anesthesia, during and after anesthesia. complications.

ANE213 SYSTEM DISEASES II

(2+0), AKTS:2

Information will be given about endocrine system diseases, urinary system diseases, genital system diseases, nervous system diseases, musculoskeletal system diseases, ENT diseases, eye diseases, psychiatric diseases

EFH102 INFECTIOUS DISEASES (BHS)

(2+0), AKTS:3

Terminology in infectious diseases, Infection chain, Microorganism and its types, Signs and symptoms of infection, Concepts related to infectious diseases, General characteristics of infectious diseases, Protection and immunization from infection, Nosocomial infections and prevention methods, Hospital infection control committee, Infections in the intensive care unit, Infectious diseases treatment methods, Respiratory transmitted diseases, Digestive transmitted diseases, Blood-borne diseases, Skin and mucous membrane-transmitted diseases, Central nervous system infections, Sexually transmitted diseases, Isolation methods, quarantine practices.

ANE225 REANIMATION APPLICATIONS**(2+2), AKTS:10**

Classification and physical properties of intensive care units, scoring system used in intensive care units, monitoring in intensive care patients, blood volume and electrolyte control in intensive care patients, sampling for arterial blood gas, blood gas device, blood gas analysis, mechanical ventilation indications and classical mechanical ventilation approach, Invasive mechanical ventilation, parameters set on the ventilator, respiratory modes, Vasoactive drug applications, Sedation and analgesia applications in intensive care patients, Nutrition in intensive care patients, Intensive care unit infections, Multiorgan failure, Intensive plant life, brain death and organ transplantation importance of care

MYO006 INTRODUCTION TO BIOMEDICAL TECHNOLOGY**(2+0), AKTS:2**

Introduction to Biomedical Technology, Fundamentals, Biomedical Ethics, Biomechanics (Mechanical Properties of Musculoskeletal System), Biomechanics (Mechanical Properties of Respiratory System and Circulatory System), Bioelectronics, Bioelectrical Events and Biosignals (EEG, ECG, EMG), Biomedical Measurement and Instrumentation, Physiological Modeling of Systems, Biomedical Device Types and Features, Biomedical Device Types and Features, Biomedical Devices Quality and Safety Standards, Use and Maintenance of Biomedical Devices, Biomaterials, Bioinformatic Technologies, Clinical Engineering Applications

SAH101 HEALTH LAW**(2+0), AKTS:2**

Social Rules and Law; Concept of Law and Legal Enforcement; Characteristics of Law Rules; Sources of Law; Branches of Law; Definition and Types of Right; Acquisition, Loss and Use of Right; Person and Types of Persons: Natural persons, Legal entities; Qualifications of Real Persons: Legal capacity, Verbal capacity; kinship; Place of residence; Protection of Personality; Possession; Ownership; Debt Relationship and Responsibility; Judicial Bodies. Health Law.

SECOND CLASS - SEMESTER IV**MET101 PROFESSIONAL ETHICS (BSEC)****(2+0), AKTS:2**

Ethics, Definition of Moral Concepts and Introduction to Professional Ethics, Examining the concepts of ethics and morality, Ethics theories, Principles of Professional Ethics, Justice, Virtue, Honesty, Human Rights, Respect for Others, Privacy, Unethical Behaviors, Professional corruption and the consequences of unethical behaviors in professional life contains.

ILK101 FIRST AID (BSEC)**(2+0), AKTS:2**

General First Aid Information, Human Body, Patient/Injured and Crime Scene Evaluation, Basic Life Support, Respiratory Tract Obstructions, Hemorrhages and Shock, Injuries, Burns, Frostbite, Heat Stroke, Conscious Disorders (Losses of Consciousness, Convulsions, Low Blood Sugar, Chest Pain), Poisoning, Animal Bites, Eye-Ear-Nose, Foreign Objects, Choking, Fractures, Dislocations, Sprains, Transport Techniques.

ANE200 ANESTHESIC PHARMACOLOGY**(2+0), AKTS:5**

Types of anesthetics, anesthetic substances used, Anesthetic drug pharmacokinetics, pharmacodynamics, anesthetic effect distribution, Intravenous anesthetic systems, Inhalation

anesthetic systems, Neuromuscular blockers, Opioid analgesics, Local anesthetics, Use in premedication, Current addition to anesthetics, Related to inotropic agents and tools related to agents, Abuse and addiction

MYO015 SOCIAL RESPONSIBILITY PROJECT

(2+0), AKTS:2

Introduction to the course, basic concepts, the concept of social responsibility and an overview of social responsibility campaigns, determination of project topics (children, the elderly, women, environmental problems, those with education and learning problems, patients and health problems, etc.) project preparation presentation. It includes the topics of recognizing non-governmental organizations and their work.

ANE206 CLINICAL ANESTHESIA

(2+0), AKTS:5

Anesthesia applications in cardiovascular system diseases, anesthesia applications in respiratory system diseases, anesthesia applications in central nervous system diseases, anesthesia applications in gynecology diseases, anesthesia applications in endocrine system diseases, anesthesia applications in renal system diseases, anesthesia applications in urogenital system diseases, anesthesia applications in orthopedic diseases, CVC Anesthesia applications in surgeries, Anesthesia applications in emergency patients, Anesthesia applications in pediatric patients, Anesthesia applications in blood diseases, Anesthesia applications in musculoskeletal system diseases, Anesthesia applications in rare diseases

KGS101 QUALITY ASSURANCE AND STANDARDS

(2+0), AKTS:2

Quality and its definition, standardization and definition, benefits of standardization for the business, for the consumer and for the economy, standardization studies in Turkey, international standardization studies and examples, Quality approaches, Total quality management, Quality assurance, ISO 9000 standards, Professional quality standards

ANE999 SUMMER INTERNSHIP***

(0+0), AKTS:9

With the theoretical knowledge, the application is carried out (20 working days) in the field.