# VOCATIONAL SCHOOL OF HEALTH SERVICES OPERATING ROOM SERVICES PROGRAM 2022-2023

# 1st YEAR FALL SEMESTER

## MYO101 BASIC ANATOMY and PHYSIOLOGY

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, Veins. Digestive system Anatomy and Physiology I. Oral anatomy, Chewing muscles, Pharynx, Oesophagus, Stomach, Small-large intestines, Kc. Gallbladder, Pancreas, Digestive glands. Digestive system. Digestion in the mouth, stomach, digestion in the small and large intestines. KC. functions, CHO digestion, Digestion of fatproteins. 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.

# AML101 SURGICAL DISEASES INFORMATION I

Introduction to Surgery (History of Surgery, Conditions Requiring Surgery, Classification of Surgery, Effect of Surgery on the Patient). Basic Theoretical Concepts in Surgery (homeostasis, pain, anxiety, surgical asepsis). Body Responses to Trauma (Inflammation, Wound/wound types, Incision/Incision types, Wound healing, Factors affecting wound healing). Preoperative (Preoperative) Period. Intraoperative Period. Postoperative (Postoperative) Period. Gastrointestinal System (GIS) Surgical Diseases and Surgical Treatment. Breast Diseases and Surgical Treatment. Breast Diseases and Surgical Treatment. Tissue and Organ Transplantation. Musculoskeletal Diseases and Surgical Treatment. Musculoskeletal Diseases and Surgical Treatment. Nervous system diseases and surgical treatment

#### MIK101 BASIC MICROBIOLOGY

Introduction to Medical Microbiology. Medical Bacteriology and Morphological Characteristics of Bacteria. Bacterial Metabolism and Reproduction. Bacterial Genetics. Bacterial Virulence Factors. Antimicrobial Agents. Medical Bacteriology. Medical Virology. Medical Parasitology. Medical Mycology. Relationships Between Microorganisms and Microorganism Human Relationship. Sterilization, Disinfection and Antisepsis. Basic Immunology. General Principles of Laboratory Diagnosis.

MYO006 INTRODUCTION TO BIOMEDICAL TECHNOLOGY (BSEC)

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

## RPSI209 POSITIVE PSYCHOLOGY AND COMMUNICATION SKILLS (HSE)

Definition of Positive Psychology and Learning the Basic Concepts. Learning Theoretical Fundamentals of Positive Psychology. Learning the Brain Infrastructure of Social Behaviors. Emotional Intelligence, Emotional Intelligence in Adults, Children and Young People, Marriage and Business Life, Emotional Intelligence Principles, Emotional Intelligence Personality Development, Learning its Relationship with Marriage and Business Life. Learning Concepts Related to Self-Knowledge and Awareness. Recognizing Others and Learning the Concepts of Empathy. Learning Communication Skills. Learning Motivation and Planning Skills. Learning Problem Solving Skills. Learning Anger Control Skills. Learning Relationship Management Skills. Learning the Concept of Persistence and Impulse Control Skills. Learning Healthy Decision Making Skills. Learning the Concepts of Compromise.

## TURK101 TURKISH LANGUAGE I

Learns the necessity of the connection between language and culture. Gains knowledge about the historical course of the Turkish Language. Learns the rules of spelling and punctuation, its necessity and its contribution to success in life. Learns the use of words in the most appropriate place in oral and written expression. He learns to use his ideas and feelings correctly and effectively.

#### INGU101 ENGLISH I

Meet, verb to be, subject pronouns. Signal pronouns, countable/uncountable nouns, quantitative expressions. Simple present tense, adverbs of frequency. Object pronouns, possessive adjectives, have got/has got. -meli,-mali,(must/mustn t)-can,-able(can/can t). Past tense (Simple Past Tense). He/she understands what he/she listens at the relevant level and makes comments. Increases vocabulary with various reading passages. Present tense. Conjunctions (and-but-therefore-because). Comparisons. Gains the ability to understand various English reading passages at intermediate level.

# ATA101 PRINCIPLES OF ATATURK AND HISTORY OF REVOLUTION I

Concepts definitions, course methods and description of resources. Industrial Revolution and the French Revolution. The Disintegration of the Ottoman Empire (XIX. Century). Tanzimat and Reform Edict, I. and II. Constitutionalism. World War I, Tripoli and Balkan Wars. Armistice of Mudros, Wilson Principles, Paris Conference. The Departure of M. Kemal to Samsun and the Situation in Anatolia. Amasya Circular, National Congresses, Opening of the Parliament. Establishment of the Turkish Grand National Assembly and Internal Revolts. Teşkilat-1 Esasi Law, Establishment of the Regular Army. I.II. Great Offensive with İnönü, Kütahya-Eskişehir and Sakarya Pitched Battles. treaties during the War of Independence. The Lausanne Peace Treaty. Abolition of the Sultanate.

# RKUL101 UNIVERSITY CULTURE I (ÜSEC)

Each semester, the academic units at the university, the student council and student clubs' suggestions. Seminars, conferences, panels, which will be held for 14 weeks within the framework of a program consisting of

Includes workshops and talks.

#### MYOO003 MEDICAL TERMINOLOGY

Introduction to Terminology, Reading rules of terms. Prefixes, Suffixes. Types of terms. Motion System Terms. Blood Terms. Cardiovascular System Terms. Respiratory System Terms. Digestive System Terms. Urinary System Terms. Genital System Terms. Endocrine System Terms. Nervous System and Psychiatry Terms. Sense Organs Terms. Diagnostic Terms.

# 1st CLASS SPRING SEMESTER

## AML114 STERILIZATION PRINCIPLES (BSEC)

Course Introduction. Historical Development of Sterilization, Disinfection and Antisepsis. Introduction to Sterilization, Disinfection and Antisepsis. Factors of Microorganism. General Concepts of Infectious Diseases. Transmission Routes of Infectious Diseases. Hospital Infections. Sterilization Methods. Disinfection Methods. Sterilization and Disinfection Rules and Control. Effect Mechanisms of Disinfectants and Antiseptics. Asepsis Techniques and Applications. Sterilizer Types. Central Sterilization Unit.

#### AML116 INFORMATION OF SURGICAL DISEASES II

Plastic Surgery and Burns, Respiratory System Diseases, Ear Nose and Throat Diseases, Cardiovascular System Diseases, Gynecological Diseases and Cesarean Section, Ophthalmology and Surgical Treatment, Genita-urinary System Diseases and Surgical Treatment, Pediatric Diseases and Surgical Treatment, Minimally Invasive Surgery.

#### AML100 OPERATING ROOM MANAGEMENT

Roles and Responsibilities of the Operating Room Team, Physical Structure of the Operating Room in the Operating Room

Organization and Management, Patient/Employee/Environmental Safety in Operating Room, Operating Room

Infection Control, Surgical Instruments and Materials, Patient Preparation for Surgery, Preparation of the Operating Room Table, Surgical Positions Applied in the Operating Room, Cleaning of the Operating Room, Recording and Documentation in the Operating Room, and Ethics in the Operating Room.

# AML120 PROFESSIONAL PRACTICES I

Surgical Hand Washing Practice, Surgical Shirt Dressing Practice, Surgical Shirt Dressing Practice, Surgical Glove Wearing Practice, Surgical Glove Dressing Practice, Surgical Positions, Surgical Instruments and Sutures, Painting and Covering the Patient.

## RKUL102 UNIVERSITY CULTURE II (ÜSEÇ)

Each semester, the academic units at the university, the student council and student clubs' suggestions. Seminars, conferences, panels, which will be held for 14 weeks within the framework of a program consisting of

Includes workshops and talks.

## ATA102 PRINCIPLES OF ATATURK AND HISTORY OF REVOLUTION II

Political Revolutions: Abolition of Sultanate, Proclamation of Republic, Abolition of Caliphate Constitutional

Movements Trials of Transition to Multi-Party Life Reforms in the Field of Law and New Law Reforms Made in the Field of Education and Culture Reforms Made in the Social Field Revolutions Made in the Economic Field Turkish Foreign Policy in the Atatürk Era (1923-1938) Atatürk's Principles: Republicanism, Nationalism, Populism, Statism, Secularism, Revolutionism Integrative Principles Post-Atatürk Turkey (Domestic and Foreign Political Developments))

## TURK102 TURKISH LANGUAGE II

The word and its meaning, words in terms of their meanings, literal, side and figurative meanings of words,

idioms, reduplications, terms, language mistakes, sentence structure of Turkish, sentence elements, sentence

analysis, written expression types such as novels, articles, essays, poems, presentations, reports and minutes.

examples, petition, business letter and CV writing, conversation and discussion.

## INGU102 ENGLISH II

tokens; Prepositions: Place, Time, Movement; Singular and Plural Nouns: Countable and Uncountable names; Tenses: Present tense, Past tense structures; Tenses: Will, Should,

Shouldn't, Must, Mustn't, Can; Comparative Structures; Pronouns: Personal pronouns, Possessive pronouns; Adjectives;

Affirmative Sentence, Negative and Interrogative Sentences; Conjunctions: And, But, -while, Because.

# 2nd YEAR FALL SEMESTER

#### SHY101 HEALTH SERVICES MANAGEMENT

Basic Concepts in Management and Historical Development of Management. Functions of Management. Health and Health Services Concepts. Classification and Functions of Health Services. Development and Organization of Health Services in Turkey. National Health Policies. International Health Policies. Hospital Management. Healthcare Financing. Human Resources Management in Healthcare Businesses. Marketing Management in Healthcare Businesses. Public Relations and Communication in Healthcare Businesses. Patient Rights and Ethics in Healthcare Businesses.

#### AML213 INTRODUCTION TO ANESTHESIA (BSEC)

History and definition of anesthesia. Determination of anesthesia risk. Central gas system and anesthesia machine. Protection of the airway. Inhalation anesthetics. Intravenous anesthetics. Analgesics. Measuring the depth of anesthesia. Muscle relaxants. Spinal anesthesia applications. Epidural anesthesia applications. Peripheral nerve blocks.

#### AML219 PROFESSIONAL PRACTICES II

Brain and Nerve Surgery Operations and Practices, General Surgery Operations and Practices, Incision and Suture Techniques, Gynecology and Obstetrics Surgery and Practices, Minimal Surgery Interventions and Practices, Orthopedic Surgery and Practices, Urology Surgery and Practice, Cardiovascular Surgery and Practices, Ear Nose Surgery and Practices Throat Surgery and Applications and Robotic Surgery and Applications.

## AML221 PATIENT SAFETY (HSE)

The concept of patient safety and its importance. Prevention of surgical errors. Prevention of surgical errors. Prevention of infection errors. Prevention of medication errors. Prevention of falls. Prevention of blood and blood transfusion lines. Prevention of infant/child abductions. Preventing serious injury and death due to restrictions. Prevention of suicides. Prevention of errors with the SBAR technique. Prevention of errors due to delay of treatments. Incident reporting in patient safety. Case study.

# ELECTIVE COURSE MYO015 SOCIAL RESPONSIBILITY PROJECT

Formation of social responsibility awareness. Developing a social responsibility project. Ability to carry out projects with teamwork. Being able to take part in activities affiliated with a non-governmental organization.

# 2nd CLASS SPRING SEMESTER

#### SAH101 HEALTH LAW

Introduction to Health Law. Basic Concepts and Institutions of Health Law. Patient Rights and Concepts. Physician Rights and Concepts. Privacy in Medical Interventions. Illumination and Consent. The Unlawfulness of Medical Intervention. Interventions Without Medical Indication. Relationship Between Hospital and Patient and Its Legal Qualification. Legal Nature of the Relationship Between Private Hospitals and Patients. Legal Nature of the Relationship Between Public Hospitals and Patients. Malpractice and Compensation Issues.

# KGS101 QUALITY ASSURANCE AND STANDARDS

Quality and its definition, standardization and its definition, standardization for business, consumer and economy

benefits, standardization studies in Turkey, international standardization studies and examples, Quality approaches, Total quality management, Quality assurance, ISO 9000 standards, Professional quality standards

#### AML200 PROFESSIONAL PRACTICES III

Brain and Nerve Surgery Applications, General Surgery Applications, Incision and Suture Techniques, Gynecology and Obstetrics Surgery Applications, Minimal Surgery Applications, Orthopedic Surgery Applications, Urology Surgery Application, Cardiovascular Surgery Applications, Ear Nose Throat Surgery Applications and Robotic Surgery Applications.

#### OTY211 EXERCISE AND BODY BUILDING (BSEC)

The concept of training, the main purpose and main tasks of training, the organism of training effects on the body and its changes, the relationship between loading and resting in training, measures of loading, aerobic training and flexibility exercises, aerobic training and flexibility exercises, isometric work principles, abdominal exercises (individual), eccentric-concentric work principles, body hold exercises theory, reverse body hold exercises theory, dynamic (isotonic) working principles, theory of concentric works, theory of eccentric works, Studies on strength training theory

#### **ILK101 FIRST AID**

General First Aid Information. Human Body, Patient/Injured and Crime Scene Assessment. Human Body, Patient/Injured and Crime Scene Assessment. Basic Life Support (Adult Basic Life Support). Basic Life Support (Basic Life Support for Children and Infants), First Aid in Respiratory Tract obstruction. First Aid for Bleeding and Shock. First Aid for Injuries. First Aid for Burns, Frostbite and Heat Stroke. First Aid in Consciousness Disorders. First Aid in Poisoning. First Aid for Animal Bites, First Aid for Foreign Objects in the Eyes, Ears and Nose, First Aid for Choking. First Aid for Fractures, Dislocations, Sprains. Patient/Wounded Transport Techniques. Patient/Wounded Transport Techniques.

# MET101 PROFESSIONAL ETHICS (HSE)

What is Ethics? / A Look at Ethical Theories / Basic Concepts: Responsibility, Accountability and Obligation / Ethical Analysis. Society and Information Ethics: The Bidirectional Relationship Between Society and Technology Information Technologies. Effects; Optimistic, Pessimistic, Contextual Views

Why Computing Ethics? The Mission of Informatics Ethics. Addiction, Health Problems, Unemployment, Social Relations. Security, Abuse and Cybercrime. Human Rights and Patient Rights. Hospital Ethics Committees. Principles of Medical Ethics and Deontology. Principles of Medical Ethics and Deontology- Presentation. Ethical Case Analysis - Student Presentation. Bioethics. Ethical Issues and Ethical Decision Making Process, Medical Ethical Dilemmas. Ethical Behavior Principles. Privacy. Case Discussion.