**USKUDAR UNIVERSITY FACULTY OF MEDICINE COURSE CONTENTS
THIRD CLASS
I. SEMESTER (FALL)**

**MDC307 Committee Course 3A: There are 3 committees within this board. These committees are Introduction to Clinical Sciences and Infectious Diseases, Hematopoietic and Neoplastic Diseases, Circulatory and Respiratory System Diseases (16+6) 19 ECTS: 22**

**Introduction to Clinical Sciences and Infectious Diseases**

The aim of this committee is to identify microorganisms of medical importance, to understand their important structural features and disease-causing processes, to explain the main diagnostic and therapeutic approaches. In this course board; Findings in diseases are examined, bacteria with medical importance, pathogenesis in bacterial diseases are learned, diagnosis and treatment methods are determined. Fungi with medical importance, fungal pathogenesis are learned, diagnosis and treatment methods are determined. The main signs and symptoms observed in infectious diseases are emphasized. Parasites with medical importance, pathogenesis of parasitic diseases are learned, diagnosis and treatment methods are determined. Viruses of medical importance, viral pathogenesis are learned, diagnosis and treatment methods are determined.

**Hematopoietic and Neoplastic Diseases**

In this course, it is aimed to give basic information and approach about neoplasia, hematopoietic and immune system. In this course committee, students will learn the structure, development and physiology of the hematopoietic system; will learn the pathogenesis of diseases related to the hematopoietic system. In addition, he will learn the symptoms of hematopoietic diseases, related risk factors, diagnosis, treatment principles and prevention of diseases. In this course board; classification of neoplasms, characteristics of benign and malignant neoplasms, etiology, spread and metastasis in neoplasia, cancer epidemiology and molecular basis of cancer, epithelial tumors, mesenchymal tumors, skin tumors, teratoma, pathology of central nervous system tumors, allergic, immunological and anaphylactic reactions; hemolytic anemia, iron deficiency anemia, aplastic-hypoplastic anemia, sickle cell anemia, hematological malignancies, immunopathology, cancer biochemistry, pharmacological principles of cancer treatment, antineoplastic drugs and biological effects of radiation.

**Circulatory and Respiratory System Diseases**

The aim of this committee is to teach basic information about heart, circulatory and respiratory system diseases and gain approaches in related fields. The epidemiology, pathological findings, clinical diagnosis, general treatment principles and pharmacological effects of drugs used for diseases of the cardiovascular and respiratory system diseases are emphasized. The development, structure and physiology of the respiratory system and the pathogenesis of diseases related to the system are learned. In addition, symptoms of lung diseases, related risk factors, diagnosis, treatment principles and prevention of lung diseases are comprehended. With an interdisciplinary approach, information is obtained about the morphology and functions of the cardiovascular system, its principles are learned, and pathophysiological mechanisms are associated with cardiovascular system diseases.

Content of MDC307 Medical Committee Courses (Com 3A):

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| --- | --- | --- |
| **Committee Courses** | **Theoretical Hours** | **Total Practical Hours (without repetition)** |
| Emergency Medicine | 4 | 0 |
| Radiation Oncology  | 6 | 0 |
| Child Health and Diseases | 20 | 0 |
| Infectious Diseases and Clinical Microbiology | 17 | 0 |
| Medical Biochemistry | 20 | 4 |
| Medical Pharmacology | 65 | 0 |
| Medical Pathology | 66 | 12 |
| Medical Microbiology | 29 | 8 |
| Thoracic Diseases | 12 | 0 |
| Cardiovascular Surgery | 4 | 0 |
| Cardiology | 13 | 0 |
| Introduction to the Clinic | 0 | 39 |
| Medical Genetics | 6 | 0 |
| Family Physician | 4 | 0 |
| Public Health  | 6 | 0 |
| Internal Diseases | 10 | 0 |
| Ear Nose Throat Diseases (ENT) | 4 | 0 |
| ***Total Hours*** | ***286*** | ***63*** |

**MED204 Health Economics (Theoric: 48 Hours) (2+0) 2 ECTS:3**

The aim of this committee is to teach the concept and methodology economics, to give basic skills about health economics analysis, to provide the ability to analyze and evaluate health economies of country systems. The content of this course is about analysis of the concept of health economics, the relationship of the health sector with economic growth and development, economic planning and planning of the health sector, project evaluation in the health sector. In addition to these, issues related to production and financing of health services, pharmaceutical industry and economy, economic rationality in health policies, economic evaluation techniques and Turkish health economy are emphasized (50 Hours).

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**MED303 Biostatistics (Theoric: 32 Hours) (2+0) 2 ECTS: 3**

The aim of this committee is to make students comprehend basic statistical knowledge and some statistical analysis methods. The content is about frequency distributions, measures of central tendency and distribution, probability and probability distributions, discrete probability distributions, normal distribution and binomial approximation to normal, hypothesis testing and confidence interval, hypothesis testing and confidence interval for population mean, importance control of difference between two population mean, peer-to-peer significance control of the difference, significance control of the population percentage and confidence interval, chi-square analysis, independence tests, dependency coefficients, regression analysis, hypothesis testing and confidence interval in simple linear regression, correlation analysis are included.

**USKUDAR UNIVERSITY FACULTY OF MEDICINE COURSE CONTENTS
THIRD CLASS
II. SEMESTER (SPRING)**

**MDC310 Committee Course 3A: There are 4 committees within this board. These boards are; Digestive System and Metabolic Diseases, Nervous and Movement System Diseases, Urogenital and Endocrine System, and Public Health and Family Physician (18+8) 22 ECTS: 22**

**Digestive System and Metabolic Diseases**

The aim of this course is to discuss the system formed by the organs related to digestion, which is one of the main functions of human beings, and the metabolic events that run this system in the body and what are the structural and other diseases and disorders that will disrupt the balance of metabolism and the diagnosis and treatment methods for them. In this course, oral and dental health, pharynx, stomach, small intestine, large intestine, rectum and anus, which are examined in the digestive system extending from the mouth to the anus canal, together with the liver, gallbladder, pancreas, which accompany the functions of this channel with their metabolic activities, and how they are managed by the central nervous system through hormones and enzymes. In examining all these dynamics, the approach to diseases related to vital elements and substances such as proteins, fats, vitamins, minerals, blood and fluid electrolyte balance, as well as elements such as hormones, enzymes, neurotransmitters is also explained.

**Nervous and Movement System Diseases**

In this board, the structure and functioning mechanisms of the central and peripheral nervous system, especially the brain and spinal cord, and the diagnosis and treatment approaches of diseases and disorders related to the function and mechanisms of this system are explained.

Multidisciplinary approach to musculoskeletal and neurological diseases: Mechanism, pathological findings, clinical findings, laboratory investigations, diagnostic imaging findings, rehabilitation and treatment of diseases are evaluated together. Topics include; peripheral nerve diseases (neuropathies) and peripheral nerve tumors, muscle diseases (myopathies) and tumors, eye diseases and tumors, developmental disorders of the nervous system, brain and spinal cord traumas, cerebrovascular diseases, central nervous system infections, demyelinating diseases, neurodegenerative diseases, dysgenetic syndromes, central nervous system tumors, epilepsy, pain physiopathology, cognitive functions, disorders of consciousness, signs and symptoms in psychiatric diseases, common psychiatric diseases of adult and childhood, reactions of children, family and physician to the disease, normal bone metabolism, bone development disorders, inflammatory diseases of bones and joints, degenerative joint diseases, bone, cartilage and soft tissue tumors, rheumatological diseases, basic findings in dermatological diseases, skin tumors. Departments of Physiology, Pharmacology, Pathology, Microbiology, Pediatrics, Neurology, Psychiatry, Orthopedics and Traumatology, Physical Therapy and Rehabilitation and Internal Medicine contribute to this course.

**Urogenital and Endocrine System**

The aim of this course is to address the diagnosis and treatment approaches of diseases and disorders related to the accumulation of harmful substances in the body, which is one of the most basic functions of human beings, filtering harmful substances from the body through the kidneys and excreting them as urine, actions related to reproductive and sexual life functions, and balancing the vital functions of the body through glands secreting into the body.

Multidisciplinary approach to reproductive, urogenital and endocrine system diseases: Mechanism of diseases, pathologic findings, clinical findings, physical examination and symptomatology, laboratory investigations, diagnostic imaging findings and treatments are evaluated together. Topics include synthesis, metabolism and clinical effects of hormones, normal puberty and sexual development, obesity, adrenal, thyroid, parathyroid and pituitary diseases and tumors; endocrine pancreas and diabetes mellitus, kidney diseases and tumors, dialysis and transplantation, urinary tract infections and obstructive uropathy, menstrual cycle, birth control, pregnancy, vulva, vagina, cervix, uterus and ovarian diseases and tumors; infertility, sexually transmitted diseases, breast diseases and breast tumors. Departments of Physiology, Pharmacology, Pathology, Microbiology, Internal Medicine, Pediatrics, Urology, Obstetrics and Gynecology and General Surgery contribute to this course.

**Public Health and Family Physician**

The aim of this committee is to transfer knowledge and skills to students in the planning, organizing, implementation and supervision activities to be carried out in relation to health protection, promotion and primary care therapeutic services in accordance with health policies and legislation.

It is aimed to teach students organized and scientific approaches to preventive and developmental services for the individual, health literacy, regional health planning, control of health risks and problems, transfer of health data to the information system and priority issues (immunization, surveillance, follow-up and control of infectious and chronic diseases).

The concept of health on a community basis will be introduced and the criteria of health will be examined. Topics include criteria of being healthy, evaluation of health parameters of a society, evidence-based approach in public health, review of common public health problems in the world and in Turkey, approaches to prevent common problems, quality criteria in health, structuring of the health system and comparison of different health systems. The Departments of Public Health, Family Medicine, History of Medicine and Deontology will contribute to this course.

Content of MDC310 Medical Committee Courses (Com 3B):

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| --- | --- | --- |
| **Committee Courses** | **Theoretical Hours** | **Total Practical Hours (without repetition)** |
| Family Physician | 16 | 16 |
| Child Health and Diseases | 11 | 0 |
| Dermatology | 6 | 0 |
| Infectious Diseases and Clinical Microbiology | 4 | 0 |
|  Physical therapy and rehabilitation | 5 | 0 |
| General Surgery | 27 | 0 |
| Eye Diseases | 5 | 0 |
| Public Health  | 32 | 8 |
| Internal Diseases | 21 | 0 |
| Gynecology and Obstetrics | 12 | 0 |
| Ear Nose Throat Diseases (ENT) | 2 | 0 |
| Introduction to the Clinic | 0 | 39 |
| Neurology | 12 | 0 |
| Orthopedics and Traumatology  | 10 | 0 |
| Plastic and Reconstructive Surgery | 4 | 0 |
| Psychiatry | 10 | 0 |
| Radiation Oncology | 2 | 0 |
| Radiology | 2 | 0 |
| Medical Biochemistry | 12 | 4 |
| Medical Pharmacology | 35 | 0 |
| Medical Genetics | 8 | 0 |
| Medical Microbiology | 27 | 10 |
| Medical Pathology | 69 | 12 |
| Urology | 6 | 0 |
| ***Total Hours*** | ***338*** | ***89*** |

**MED310 Deontology and Medical History (Theoric: 32 hours) (2+0) 2 ECTS: 2**

The aim of this course is to introduce the stages of medicine from the first periods of history to the present, to determine the contribution of different cultures and civilizations to medicine and to show their reflections on today's medical practices. In the deontology section; to introduce the basic approaches related to professional ethics, to introduce the ethical problems encountered in medical practice and to show different approaches to solve these problems.

In the content of this course; In the history of medicine courses; the effect of changing thoughts and orientations about health from prehistory to today on practices, the contribution of different societies and civilizations to medicine, health structures, institutions and medical artifacts in Anatolia, health education and services in the late Ottoman and Republican periods. Deontology courses focus on the definition and dimensions of medical ethics and clinical ethics, principles of medical ethics, ethical problems related to the beginning and end of life, different approaches to sharing limited health resources, factors affecting physician-patient relationships, patient rights, gene therapies and ethical dilemmas in contemporary diagnosis and treatment.

**MED206 Health Informatics and Technologies (Theoric: 32 hours) (2+2) 3 ECTS: 4**

The concept of informatics and health informatics / informatics tools (hardware, software, internet), health informatics resources, health data, electronic record system (ERS) / how to use computers to share information with patients / effective use of consultations / patient follow-up / ICD 10 / the place of information technologies in medical practice / access to personal information / technological tools that can contribute to the management of information / information production / information sharing, medical decision support system / data-information, information-communication, data-processing, database management / patient records, medical imaging systems / central patient information systems / clinical reporting systems / pharmacy systems / nursing information systems / quality systems / strategic analysis / management information system formation / information system security / application of information system in international areas.