

| COURSE INFORMATION | | | | | |
|-----------------------------------|---------|----------------|----------|---------|------|
| Course Title | Code | Phase/Semester | L+P Hour | Credits | ECTS |
| Introduction to Clinical Sciences | MED 302 | Phase 3 / 5-6 | 707+17 | 53 | 53* |

*ECTS credits are the university credits of the courses in Yeditepe University, Faculty of Medicine, Undergraduate Medical Education Program

| | | | | | |
|---------------|------------------------|-----|--------------------------------------|--|--|
| Prerequisites | Phase 2 / Semester 1-2 | | | | |
| | MED | 203 | Basic Medical Sciences | | |
| | MED | 202 | Introduction to Clinical Practice II | | |

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|-------------------------|--|
| Language of Instruction | English |
| Course Level | Second Cycle including First Cycle Degree (One Tier Programme) |
| Course Type | Compulsory |
| Course Coordinators | <p style="text-align: center;">COORDINATION COMMITTEE</p> <p style="text-align: center;">Deniz KIRAÇ, PhD, Prof. (Coordinator)</p> <p style="text-align: center;">Figen ATALAY, MD, Prof. (Co-coordinator)</p> <p style="text-align: center;">Emine Nur ÖZDAMAR, MD, Assist. Prof. (Co-cordinator)</p> <p style="text-align: center;">Erdem SÖZTUTAR, MD, Assist. Prof. (Co-coordinator)</p> <p style="text-align: center;">Cenk ANDAÇ, PhD, Assist. Prof. (Co-coordinator)</p> <p style="text-align: center;">Başak ARU, PhD, Assist. Prof. (Co-coordinator)</p> <p style="text-align: center;">Büşra NİZAM, MD, Assist. Prof. (Co-coordinator)</p> <p style="text-align: center;">Didem SEVEN, PhD, Instructor (Co-coordinator)</p> <p style="text-align: center;">Özge Başer, PhD, Instructor (Co-coordinator)</p> |

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|----------------|--|
| Goals | <p>In evidence based manner:</p> <ol style="list-style-type: none"> 1. to remind anatomy, histology and physiology of body systems, 2. to convey necessary knowledge, related to body systems, on prevention of clinical conditions' emergence, protection and improvement of health in healthy conditions. 3. at multi-system level or related to a body system, for clinical conditions which are frequent in community and/or pose high risk for individual or community health, and/or life-threatening or constitute an emergency; 3.1. to convey necessary knowledge on risk factors, etiopathogenesis, physiopathology, and pathology, 3.2. to convey knowledge on epidemiology, 3.3. to convey knowledge on frequently encountered clinical complaints, symptoms, signs and findings, 3.4. to convey necessary knowledge on health care processes, clinical decision making process, clinical decisions and clinical practices, with performance measures, for managing at the level of 7 primary health care service, 4. to convey knowledge on pharmacology of drugs that are effective at multi- system level, specifically on a body system or on clinical conditions involving a specific body system, 5. to convey knowledge on phytotherapeutic agents that are effective at multi- system level, specifically on a body system or on clinical conditions involving a specific body system, 6. to convey knowledge on biostatistical analysis, 7. to convey basic legal and ethical principles that should be followed in practice of medical profession, |
| Content | <p>Course Components:</p> <p>COMMITTEE I - INFECTIOUS DISEASES & HEMATOPOIETIC SYSTEM</p> <p>COMMITTEE II - CARDIOVASCULAR & RESPIRATORY SYSTEMS</p> <p>COMMITTEE III - GASTROINTESTINAL SYSTEM</p> <p>COMMITTEE IV - ENDOCRINE, REPRODUCTIVE & URINARY SYSTEMS</p> <p>COMMITTEE V - NERVOUS SYSTEM AND PSYCHIATRY</p> <p>COMMITTEE VI - MUSCULOSKELETAL SYSTEM</p> |

CONTENT of COURSE

Emergency Medicine Department (Total:9 hrs)

| Lecture | Hour | | Committee |
|--|--------------------|------------------|------------------|
| | Theoretical | Practical | |
| Emergency Evaluation of Sepsis and Septic Shock | 1 | 0 | 1 |
| Emergency Evaluation of Dyspnea | 1 | 0 | 2 |
| Pediatric Advanced Life Support | 1 | 0 | 2 |
| Clinical Approach to the Patient with Acute Abdominal Pain | 1 | 0 | 3 |
| Mesenteric Ischemia | 1 | 0 | 3 |
| Hypertensive Disorders in Pregnancy | 1 | 0 | 4 |
| Approach to Intoxicated Patient | 1 | 0 | 5 |
| Initial Approach to Trauma Patient | 1 | 0 | 6 |
| Frostbite / Burns | 1 | 0 | 6 |

Neurosurgery Department (Total:T 15 hrs, P: 2 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Clinical presentation, anatomical concepts and diagnosis in a neurosurgical patient | 1 | 0 | 5 |
| Surgical neuroanatomy | 1 | 0 | 5 |
| Cerebrovascular diseases in Neurosurgery I-II | 2 | 0 | 5 |
| Intracranial tumors I-II | 2 | 0 | 5 |
| Spinal cord compression and spinal tumors | 1 | 0 | 5 |
| Degenerative diseases of the spine and the spinal cord | 1 | 0 | 5 |
| Cranial trauma in neurosurgery | 1 | 0 | 5 |
| Spinal trauma in neurosurgery | 1 | 0 | 5 |
| Neurosurgical infections | 1 | 0 | 5 |
| Hydrocephalus | 1 | 0 | 5 |
| Peripheral nerve compression syndromes | 1 | 0 | 5 |
| Functional neurosurgery | 1 | 0 | 5 |
| Pediatric neurosurgery | 1 | 0 | 5 |
| Neurosurgery Clinical Training | 0 | 2 | 5 |

Biostatistics Department (Total:18 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Planning Medical Studies I-II | 2 | 0 | 1 |
| Research Design | 1 | 0 | 1 |
| Principals of Statistical Analysis I-II | 2 | 0 | 2 |
| Preparing to Analyse Data | 1 | 0 | 2 |
| Comparing Groups-categorical Data | 1 | 0 | 3 |
| Comparing Groups-continuous Data I-II | 2 | 0 | 3 |
| Relation Between Two Variables I-II | 2 | 0 | 4 |
| Relation Between Several Variables | 1 | 0 | 4 |
| Design of Survival Studies | 1 | 0 | 5 |
| Analysis of Survival Studies I-II | 2 | 0 | 5 |
| Some Common Problems in Medical Research | 1 | 0 | 6 |
| Power Analysis and Sample Size Calculation I-II | 2 | 0 | 6 |

Child and Adolescent Psychiatry Department Lecture Content (Total:3 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Introduction to Child and Adolescent Psychiatry | 1 | 0 | 5 |
| Common Childhood Psychiatric Problems | 1 | 0 | 5 |
| Mental Development in Childhood and Adolescence | 1 | 0 | 5 |

Gastroenterohepatology Department (Total:24 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Semiology I-II | 2 | 0 | 3 |
| Steatohepatitis | 1 | 0 | 3 |
| Alcoholic Liver Disease | 1 | 0 | 3 |
| Jaundice | 1 | 0 | 3 |
| Tumors of Esophagus, Stomach and Small Intestine | 1 | 0 | 3 |
| Functional GI Disorders & Irritable Bowel Disease | 1 | 0 | 3 |
| Gastritis and Helicobacter Pylori | 1 | 0 | 3 |
| Chronic /Viral Hepatitis | 1 | 0 | 3 |
| Cirrhosis and Portal Hypertension | 1 | 0 | 3 |
| Gastroesophageal Reflux (GE) and Esophageal Motility Disorder | 1 | 0 | 3 |
| Tumors of the Bile Ducts and Pancreas | 1 | 0 | 3 |
| Toxic Hepatitis | 1 | 0 | 3 |
| Malabsorption | 1 | 0 | 3 |
| Peptic Ulcer Disease | 1 | 0 | 3 |
| Abdominal pain | 1 | 0 | 3 |
| Inflammatory bowel disease | 1 | 0 | 3 |
| Disease of Bile Duct and Gallbladder | 1 | 0 | 3 |
| Acute and Chronic pancreatitis | 1 | 0 | 3 |
| Wilson Disease and Hemochromatosis | 1 | 0 | 3 |
| Mass Lesions of the Liver | 1 | 0 | 3 |
| Acute liver failure | 1 | 0 | 3 |
| Autoimmune hepatitis | 1 | 0 | 3 |
| Premalignant lesion of the colon | 1 | 0 | 3 |

Pharmacology Department (Total:87 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| β Lactam Antibiotics I-II | 2 | 0 | 1 |
| Introduction to Antimicrobial Chemotherapy | 1 | 0 | 1 |
| Vancomycin & Other Cell Wall Synthesis Inhibitors | 1 | 0 | 1 |
| Aminoglycosides | 1 | 0 | 1 |
| Sulfonamides, Chloramphenicol & Tetracyclines | 1 | 0 | 1 |
| Anthelmintic Drugs | 1 | 0 | 1 |
| Antiprotozoal Drugs | 1 | 0 | 1 |
| Immunomodulators | 1 | 0 | 1 |
| Antimalarial Drugs | 1 | 0 | 1 |
| Macrolides | 1 | 0 | 1 |
| Quinolones | 1 | 0 | 1 |
| Antiviral Drugs | 1 | 0 | 1 |
| Antifungal Drugs | 1 | 0 | 1 |
| Antiseptics and Disinfectants | 1 | 0 | 1 |
| Antimycobacterial Drugs | 1 | 0 | 1 |
| Antianemic Drugs | 1 | 0 | 1 |
| Pharmacological Basis of Cancer Therapy I-II | 2 | 0 | 1 |
| Hematostatic Drugs and Hematostatic Blood Products I-II | 2 | 0 | 1 |
| Hypertension Treatment Guidelines | 1 | 0 | 2 |
| Anti-hypertensive Drugs I-II | 2 | 0 | 2 |
| Pharmacology of ReninAngiotensin System | 1 | 0 | 2 |
| Pharmacology Case Studies | 1 | 0 | 2 |
| Drugs Used in the Treatment of Dyslipidemias I-II | 2 | 0 | 2 |
| Anticoagulant, Antiplatelet & Thrombolytic drugs | 1 | 0 | 2 |
| Treatment of Cough & Drugs Used in the Treatment of Common Cold | 1 | 0 | 2 |
| Pharmacology and Toxicology of Tobacco | 1 | 0 | 2 |
| Drugs Used in the Treatment of Asthma& Chronic Obstructive Lung Disease | 1 | 0 | 2 |
| Drugs Used in Congestive Heart Disease I-II | 2 | 0 | 2 |
| Drugs Used in the Treatment of Angina Pectoris | 1 | 0 | 2 |
| | | | |
| Drugs Used in Cardiac Arrhythmias I-II | 2 | 0 | 2 |
| Diuretic Agents I-II | 2 | 0 | 2 |
| Acetylcholinesterase Inhibitors | 1 | 0 | 2 |
| Acetylcholine and Directly Acting Parasympathomimetic Drugs | 1 | 0 | 2 |
| Parasympatholytic Drugs | 1 | 0 | 2 |
| Sympathomimetic Drugs: Catecholamines & Noncatecholamines | 1 | 0 | 2 |
| Introduction to Autonomic System Pharmacology | 1 | 0 | 2 |
| | | | |
| Adrenergic Receptor Blockers | 1 | 0 | 2 |
| Adrenergic Neuron Blockers | 1 | 0 | 2 |
| Agents used in the Treatment of Peptic Ulcer I-II | 2 | 0 | 3 |
| Antiemetic Agents | 1 | 0 | 3 |
| Digestive & Antidiarrheal Drugs | 1 | 0 | 3 |
| | | | |
| Laxatives | 1 | 0 | 3 |
| Introduction to Endocrine Pharmacology | 1 | 0 | 4 |
| Thyroid and Antithyroid Drugs I-II | 2 | 0 | 4 |
| Insulin and Oral Antidiabetic Drugs I-II | 2 | 0 | 4 |
| Adrenocortical Hormones and Drugs I-II | 2 | 0 | 4 |
| Agents Effecting Bone Mineral Homeostasis I-II | 2 | 0 | 4 |
| Androgens & Anabolic Steroids | 1 | 0 | 4 |
| Estrogens, Progestins and Inhibitors I-II | 2 | 0 | 4 |
| Hypothalamic and Pituitary Hormones I-II | 2 | 0 | 4 |
| Introduction to Central Nervous System Pharmacology | 1 | 0 | 5 |
| Pharmacological Approach to Parkinsonism & Other Movement Disorders I -II | 2 | 0 | 5 |
| Antiepileptics | 1 | 0 | 5 |
| Antimigraine Drugs | 1 | 0 | 5 |
| Local Anesthetics | 1 | 0 | 5 |
| General Anesthetics | 1 | 0 | 5 |
| Drug Dependence & Abuse | 1 | 0 | 5 |
| The Alcohols | 1 | 0 | 5 |
| Antidepressant Drugs | 1 | 0 | 5 |
| | | | |
| Opioid Analgesics & Antagonists I-II | 2 | 0 | 5 |
| Sedative / Hypnotic Drugs I-II | 2 | 0 | 5 |
| CNS Stimulants and Hallucinogenic Drugs | 1 | 0 | 5 |
| Bipolar Disease & Lithium | 1 | 0 | 5 |

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|--|---|---|---|
| Antipsychotic Drugs | 1 | 0 | 5 |
| Nonsteroidal Antiinflammatory Drugs I-II | 2 | 0 | 6 |
| Disease Modifying Antirheumatic Drugs | 1 | 0 | 6 |
| Pharmacology Case Studies | 1 | 0 | 6 |
| Skeletal Muscle Relaxants | 1 | 0 | 6 |

Pathophysiology Department (Total:27 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Pathophysiology of Infectious Diseases | 3 | 0 | 1 |
| Pathophysiology of Hematopoietic System Disorders | 3 | 0 | 1 |
| Pathophysiology of Cardiovascular System Disorders | 3 | 0 | 2 |
| Pathophysiology of Respiratory System Disorders | 4 | 0 | 2 |
| Pathophysiology of Gastrointestinal Disorders | 3 | 0 | 3 |
| Pathophysiology of Endocrine System Diseases | 3 | 0 | 4 |
| Pathophysiology of Reproductive System Diseases | 2 | 0 | 4 |
| Pathophysiology of Urinary System Diseases | 2 | 0 | 4 |
| Pathophysiology of Nervous System Diseases | 2 | 0 | 5 |
| Pathophysiology of Musculoskeletal System Disorders | 2 | 0 | 6 |

Thoracic Surgery Department (Total:3 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Surgical Disorders of Mediastinum and the Diaphragm | 1 | 0 | 2 |
| Respiratory muscles and surgical anatomy of Thorax | 1 | 0 | 2 |
| Surgical Treatment of Pulmonary Diseases | 1 | 0 | 2 |

Chest Medicine Department (Total:18 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| History and Symptoms in Pulmonary Diseases | 1 | 0 | 2 |
| Physical Examination and Signs in Pulmonary Diseases | 1 | 0 | 2 |
| Chronic Obstructive Pulmonary Disease | 1 | 0 | 2 |
| Diagnostic Methods in Pulmonary Medicine | 1 | 0 | 2 |
| Clinical Application of Pulmonary Function Tests | 1 | 0 | 2 |
| Bronchial Hyperreactivity and Asthma | 1 | 0 | 2 |
| Tracheobronchitis | 1 | 0 | 2 |
| Pneumonia | 1 | 0 | 2 |
| Pulmonary Tuberculosis | 1 | 0 | 2 |
| Pulmonary Embolism | 1 | 0 | 2 |
| Special Pulmonary Problems | 1 | 0 | 2 |
| Pulmonary Hypertension | 1 | 0 | 2 |
| Respiratory Failure | 1 | 0 | 2 |
| Bronchiectasis | 1 | 0 | 2 |
| Lung Cancer | 1 | 0 | 2 |
| Pleural Diseases | 1 | 0 | 2 |
| Interstitial Lung Diseases | 1 | 0 | 2 |
| Sleep Apnea Syndrome | 1 | 0 | 2 |

Immunology Department (Total:16 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Case Discussion on Immunity to Infection Transplantation Immunology Immunodeficiencies | 6 | 0 | 1 |
| Hypersensitivity reactions | 2 | 0 | 2 |
| Immunologic Tolerance and Autoimmunity | 2 | 0 | 3 |
| Immunology of Reproduction | 2 | 0 | 4 |
| Neuroimmunological Disorders | 2 | 0 | 5 |
| Immune Mechanisms of Musculoskeletal Disorders | 2 | 0 | 6 |

Cardiology Department (Total:14 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| General Signs and Principal Symptoms in Cardiovascular System Diseases | 1 | 0 | 2 |
| Examination of the Heart | 1 | 0 | 2 |
| Hypertension | 1 | 0 | 2 |
| Pericardial Diseases | 1 | 0 | 2 |
| Coronary Artery Disease I-II | 2 | 0 | 2 |
| Valvular Heart Diseases | 1 | 0 | 2 |
| Infective Endocarditis and Acute Rheumatic Fever | 1 | 0 | 2 |
| Congestive Heart Failure I-II | 2 | 0 | 2 |
| Electrocardiography I-II | 2 | 0 | 2 |
| Cardiac Arrhythmias | 1 | 0 | 2 |
| Grown-up Congenital Heart Disease | 1 | 0 | 2 |

ENT Diseases Department (Total:4 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Laryngeal and Voice Diseases | 1 | 0 | 2 |
| Diseases of the Middle Ear and Eustachian Tube | 1 | 0 | 2 |
| Diseases of the Nose and Paranasal Sinuses | 1 | 0 | 2 |
| Nasopharyngeal and Oropharyngeal Diseases | 1 | 0 | 2 |

Neurology Department (Total T:14 hrs, P:2 hrs)

| Lecture | Hour | | Committee |
|------------------------------------|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Signs and Symptoms in Neurology | 1 | 0 | 5 |
| Cranial Nerves I-II | 2 | 0 | 5 |
| Introduction to Neuroimmunology | 1 | 0 | 5 |
| Demyelinating Disorders I-II | 2 | 0 | 5 |
| Epilepsy | 1 | 0 | 5 |
| Headache in Neurologic Patient | 1 | 0 | 5 |
| Extrapyramidal System Disorders | 1 | 0 | 5 |
| Peripheral Nerve Disorders | 1 | 0 | 5 |
| Cerebrovascular Disease | 1 | 0 | 5 |
| Cerebral Lobes and their Disorders | 1 | 0 | 5 |
| Dementia | 1 | 0 | 5 |
| Neurological Emergencies | 1 | 0 | 5 |
| Neurology Clinical Training | 0 | 2 | 5 |

Orthopaedics and Traumatology Department (Total:19 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Introduction to Musculoskeletal System | 1 | 0 | 6 |
| Degenerative Osteoarthritis | 1 | 0 | 6 |
| Foot Deformities | 1 | 0 | 6 |
| Principles of Fracture Healing | 1 | 0 | 6 |
| Osteomyelitis | 1 | 0 | 6 |
| Septic Arthritis | 1 | 0 | 6 |
| Development Dysplasia of the Hip | 1 | 0 | 6 |
| Upper Extremity Trauma | 1 | 0 | 6 |
| Lower Extremity Trauma | 1 | 0 | 6 |
| Traumatic Dislocations | 1 | 0 | 6 |
| Spinal Trauma | 1 | 0 | 6 |
| Spinal Deformities | 1 | 0 | 6 |
| Osteoporosis | 1 | 0 | 6 |
| Benign Tumors of Bone | 1 | 0 | 6 |
| Malignant Tumors of Bone | 1 | 0 | 6 |
| Management of the Trauma Patient | 1 | 0 | 6 |
| Complications of Fractures | 1 | 0 | 6 |
| Management of Soft Tissue Disorders | 1 | 0 | 6 |
| Fractures of Children | 1 | 0 | 6 |

Psychiatry Department (Total:12 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Introduction to Psychiatry | 1 | 0 | 5 |
| Psychiatric Interview , History | 1 | 0 | 5 |
| Psychiatric Epidemiology and Classification | 1 | 0 | 5 |
| Developmental Psychopathology: Risk and Protective Factors in Mental Development | 1 | 0 | 5 |
| Signs and Symptoms in Psychiatry | 1 | 0 | 5 |
| Schizophrenia Spectrum and Other Psychotic Disorders I-II | 2 | 0 | 5 |
| Neuroscience I-II | 2 | 0 | 5 |
| Mood Disorders I-II | 2 | 0 | 5 |
| Anxiety Disorders: An Introduction | 1 | 0 | 5 |

Radiology Department (Total:6 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| X-Ray Examination of the Lungs | 1 | 0 | 2 |
| Radiology of Gastrointestinal System | 1 | 0 | 3 |
| Imaging of Thyroid Glands | 1 | 0 | 4 |
| Imaging of Urinary System | 1 | 0 | 4 |
| Conventional Neuroradiological Examination | 1 | 0 | 5 |
| Imaging of Musculoskeletal System | 1 | 0 | 6 |

Medical Genetics Department (Total:20 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Introduction to Clinical Genetics | 1 | 0 | 1 |
| Inherited Immune System Disorders | 1 | 0 | 1 |
| Genetics of Oncology I-II | 2 | 0 | 1 |
| Molecular Basis of Hemoglobinopathies | 1 | 0 | 1 |
| Inherited Respiratory System Disorders | 1 | 0 | 2 |
| Inherited Cardiovascular Disorders | 1 | 0 | 2 |
| Complex Diseases-Inherited Gastrointestinal System Disorders | 2 | 0 | 3 |
| Chromosomal Disorders I-II | 2 | 0 | 4 |
| Genetic Counseling | 1 | 0 | 4 |
| Prenatal Genetic Diagnosis | 1 | 0 | 4 |
| Genetic disorders of gonadal development | 2 | 0 | 4 |
| Genetic Etiology of Mental Retardation I-II | 2 | 0 | 5 |
| Genetic Aspects of Psychiatric Disorders | 1 | 0 | 5 |
| Skeletal Dysplasias | 1 | 0 | 6 |
| Muscular Dystrophies | 1 | 0 | 6 |

Medical Oncology Department (Total:3 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Introduction to Clinical Oncology I-II | 2 | 0 | 1 |
| Treatment approaches of cancer | 1 | 0 | 1 |

Biomedical Ethics & Deontology Department (Total:28 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Beneficence and NonMaleficence | 1 | 0 | 1 |
| Transplantation | 1 | 0 | 1 |
| Principles of Autonomy and Informed Consent | 1 | 0 | 1 |
| Justice in Medicine | 1 | 0 | 1 |
| Transhumanisms and Ethics | 1 | 0 | 1 |
| Ethics of the Future/Future of Ethics | 1 | 0 | 1 |
| Bioethics | 1 | 0 | 1 |
| Responsible Biomedical Research | 1 | 0 | 1 |
| Introduction to the Course | 1 | 0 | 1 |
| Ethics of Publication | 1 | 0 | 1 |
| Physician-Patient Relationship | 1 | 0 | 1 |
| Confidentiality and Truthfulness | 1 | 0 | 1 |
| Ethical Issues at the Beginning of Life | 1 | 0 | 2 |
| Ethical Issues in Paediatrics | 1 | 0 | 2 |
| Ethics in Intensive Care | 1 | 0 | 2 |
| Ethics in Psychiatry | 1 | 0 | 2 |
| Palliative Care Ethics | 1 | 0 | 3 |
| Medical Ethical Decision-Making | 1 | 0 | 3 |
| Ethics and the Law | 1 | 0 | 3 |
| Public Health Ethics | 1 | 0 | 3 |
| The Ethics of Patents on Life | 1 | 0 | 3 |
| Ethics of Dealing with Addiction | 1 | 0 | 3 |
| Ethics of Elective Interventions | 1 | 0 | 3 |
| The Ethics of Testing and Screening | 1 | 0 | 3 |
| The Ethics of Dealing with Infectious Diseases | 1 | 0 | 3 |
| Ethical Issues at the End of Life | 1 | 0 | 3 |
| Reproductive Ethics | 1 | 0 | 4 |
| Gene Ethics | 1 | 0 | 4 |

Hematology Department (Total:11 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Quantitative and Qualitative Platelet Disorders | 1 | 0 | 1 |
| Approach to the Patient with Anemia and Laboratory Tests in Diagnosis with Anemia | 1 | 0 | 1 |
| Lymphoma | 1 | 0 | 1 |
| Acute Leukemias | 1 | 0 | 1 |
| Myeloproliferative Diseases | 1 | 0 | 1 |
| Chronic Leukemia | 1 | 0 | 1 |
| Aplastic and Hypoplastic Anemias | 1 | 0 | 1 |
| Nutritional Anemias | 1 | 0 | 1 |
| Plasma Cell Dyscrasias | 1 | 0 | 1 |
| Hypercoagulability | 1 | 0 | 1 |
| Immune Acquired Hemolytic Anemias / Non-Immune Acquired Hemolytic Anemias | 1 | 0 | 1 |

Public Health Department (Total:31 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Investigation of a Disease Epidemic I-II | 2 | 0 | 1 |
| Epidemiology of Communicable Diseases I-II | 2 | 0 | 1 |
| Public Health and Communicable Diseases I-II | 2 | 0 | 1 |
| Prevention and Control of Communicable Diseases I-II | 2 | 0 | 1 |
| Tobacco Control and Chronic Non-Communicable Diseases I-II-III-IV | 4 | 0 | 2 |
| Epidemiology, Prevention and Control of Chronic Non-Communicable Respiratory Diseases | 1 | 0 | 2 |
| Epidemiology and Prevention of Cardiovascular Diseases I-II | 2 | 0 | 2 |
| Public Health and Chronic Non-Communicable Diseases | 1 | 0 | 2 |
| Public Health and Nutrition I-II | 2 | 0 | 3 |
| Epidemiology, Prevention and Control of Obesity | 1 | 0 | 3 |
| Epidemiology, Prevention and Control of Type II Diabetes Mellitus | 1 | 0 | 4 |
| Reproductive, Maternal and Child Health II | 3 | 0 | 4 |
| Public Health and Aging I-II | 2 | 0 | 5 |
| Culture, Health and Illness | 1 | 0 | 5 |
| Behavioral Determinants of Health and Disease | 1 | 0 | 5 |
| Public Health and Physical Activity I-II | 2 | 0 | 6 |
| Epidemiology, Prevention and Control of Occupational Diseases and Injuries I-II | 2 | 0 | 6 |

Phytotherapy Department (Total:8 hrs)

| Lecture | Hour | | Committee |
|-----------------------|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Phytotherapy I-II-III | 3 | 0 | 1 |
| Phytotherapy-IV-V-VI | 3 | 0 | 3 |
| Phytotherapy-VII-VIII | 2 | 0 | 4 |

Pediatrics Department (Total:14 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Approach to the Pediatric Patient with Fever | 1 | 0 | 1 |
| Introduction to Anemias in Childhood | 1 | 0 | 1 |
| Introduction to Hemolytic Anemias Thalassemias and Hemoglobinopathies (Sickle Cell Anemia and Others) | 1 | 0 | 1 |
| Hemophilia and other Coagulopathies in Childhood | 1 | 0 | 1 |
| Congenital Heart Disease in Pediatrics | 1 | 0 | 2 |
| Approach to the Pediatric Patient with Pneumonia | 1 | 0 | 2 |
| Clinical Nutrition | 1 | 0 | 3 |
| Physical Examination of New born Patient | 1 | 0 | 4 |
| Physical Examination of Child Patient | 1 | 0 | 4 |
| Nephritic and Nephrotic Syndrome | 1 | 0 | 4 |
| Infectious Disease of the Nervous System | 1 | 0 | 5 |
| Neurodegenerative Disorders | 1 | 0 | 5 |
| Cerebral Malformations | 1 | 0 | 5 |
| Mental and Motor Development | 1 | 0 | 5 |

Pediatric Endocrinology Department (Total:3 hrs)

| Lecture | Hour | | Committee |
|--------------------------------|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Normal Pubertal Development | 1 | 0 | 4 |
| Congenital Adrenal Hyperplasia | 1 | 0 | 4 |
| Pubertal Disorders | 1 | 0 | 4 |

Rheumatology Department (Total:9 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Spondylarthropaties | 1 | 0 | 6 |
| Inflammatory Polyarthritis & Rheumatoid Arthritis | 1 | 0 | 6 |
| Miscellaneous Rheumatological Disorders I-II-III | 3 | 0 | 6 |
| Connective Tissue Disorders I-II | 2 | 0 | 6 |
| Vasculitis I-II | 2 | 0 | 6 |

Physical Medicine and Rehabilitation Department (Total:5 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Osteoporosis and Osteoarthritis Treatment, Rehabilitation | 2 | 0 | 6 |
| Soft Tissue Pain | 1 | 0 | 6 |
| Neck, Shoulder and Wrist Pain | 1 | 0 | 6 |
| Low Back, Hip and Ankle Pain | 1 | 0 | 6 |

Ophtalmology Department (Total:3 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Paralytic Strabismus and Nistagmus | 1 | 0 | 5 |
| Diseases of Optic Nerves and Visual Fields | 1 | 0 | 5 |
| Pupilla | 1 | 0 | 5 |

Urology Department (Total:6 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Benign Prostatic Hyperplasia-I-II | 2 | 0 | 4 |
| Urologic Emergencies | 1 | 0 | 4 |
| Approach to the Patient with Urinary Tract Symptoms | 1 | 0 | 4 |
| Urologic Oncology I-II | 2 | 0 | 4 |

Pediatric Surgery Department (Total:1 hr)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Congenital Anomalies of The Urinary System | 1 | 0 | 4 |

General Surgery Department (Total:3 hrs)

| Lecture | Hour | | Committee |
|------------------------------|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Transplantation of liver | 1 | 0 | 3 |
| Transplantation of Kidney | 1 | 0 | 4 |
| General Physical Examination | 1 | 0 | 5 |

Nephrology Department (Total:15 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Fluid, Electrolyte I-II | 2 | 0 | 4 |
| Nephritic Syndrome | 1 | 0 | 4 |
| Nephrotic Syndrome | 1 | 0 | 4 |
| Acute Kidney Injury-I-II | 2 | 0 | 4 |
| The Kidney Systemic Disease and Inherited Disorders | 2 | 0 | 4 |
| Chronic Kidney Disease | 2 | 0 | 4 |
| Acid/ Base Balance I-II | 2 | 0 | 4 |
| Clinical Study of Renal Functions and Urinary Findings | 1 | 0 | 4 |
| Tubulointerstitial Diseases | 2 | 0 | 4 |

Endocrinology Department (Total:13 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Introduction to Endocrinology | 1 | 0 | 4 |
| Introduction to Diabetes Mellitus | 1 | 0 | 4 |
| Clinical and Laboratory Findings of Diabetes Mellitus | 1 | 0 | 4 |
| Obesity | 1 | 0 | 4 |
| Calcium Metabolism | 1 | 0 | 4 |
| Hypoglycemia | 1 | 0 | 4 |
| Hypercalcemic Diseases | 1 | 0 | 4 |
| Hyperfunctioning Disorders of Anterior Pituitary Gland | 1 | 0 | 4 |
| Disorders of Posterior Pituitary Gland | 1 | 0 | 4 |
| Neuroendocrine tumors | 1 | 0 | 4 |
| Thyroid Function Tests and Thyroid Disorders | 1 | 0 | 4 |
| Hypocalcemic Diseases | 1 | 0 | 4 |
| Adrenal Disorders | 1 | 0 | 4 |

Obstetrics and Gynecology Department (Total:17 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Puerperal Infections | 1 | 0 | 4 |
| Normal and Abnormal Labor | 1 | 0 | 4 |
| The Gynecological History and Examination | 1 | 0 | 4 |
| Endometriosis & Adenomyosis | 1 | 0 | 4 |
| Antenatal Care | 1 | 0 | 4 |
| Disorders of Early Pregnancy (Miscarriage; Ectopic; GTD) | 1 | 0 | 4 |
| Normal and Abnormal Sexual Development & Puberty | 1 | 0 | 4 |
| The Menstrual Cycle and Disorders of the Menstrual Cycle | 1 | 0 | 4 |
| Conditions Affecting Vulva & Vagina | 2 | 0 | 4 |
| Benign Diseases of the Uterus and the Cervix | 1 | 0 | 4 |
| Benign Diseases of the Ovary | 1 | 0 | 4 |
| Malign Diseases of the Uterus and the Cervix | 1 | 0 | 4 |
| Malign Diseases of the Ovary | 1 | 0 | 4 |
| Menopause | 1 | 0 | 4 |
| Fertility Control | 1 | 0 | 4 |
| Infertility | 1 | 0 | 4 |

Infectious Diseases Department (Total:28 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Hospital Infection | 1 | 0 | 1 |
| Febrile Neutropenia | 1 | 0 | 1 |
| Infections in Immunocompromised Host | 1 | 0 | 1 |
| Occupational Health Hazards I-II | 2 | 0 | 1 |
| Vaccines | 1 | 0 | 1 |
| Blood Components and Transfusion Indications | 1 | 0 | 1 |
| Blood Groups | 1 | 0 | 1 |
| Semiology-I-II | 2 | 0 | 1 |
| Lenforeticular Infections I-II | 2 | 0 | 1 |
| Bloodstream Invasion & Sepsis I-II | 2 | 0 | 2 |
| Cardiac Infections | 1 | 0 | 2 |
| Upper and Lower Respiratory System Infections I-II | 2 | 0 | 2 |

| | | | |
|--|---|---|---|
| Acute Gastroenteritis | 1 | 0 | 3 |
| Hepatitis I-II | 2 | 0 | 3 |
| Food Poisoning | 1 | 0 | 3 |
| Congenital Infections and Sexually Transmitted Diseases, Genital Infections I-II-III | 3 | 0 | 4 |
| Upper and Lower Urinary Tract Infections I-II | 2 | 0 | 4 |
| Acute and Chronic Meningitis, Encephalitis I-II | 2 | 0 | 5 |

Microbiology Department (Total T:38 hrs, P:8 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Opportunistic parasitic infections | 1 | 0 | 1 |
| Tissue and blood protozoa | 2 | 0 | 1 |
| Retroviral Infections and HIV | 1 | 0 | 1 |
| Opportunistic Mycoses | 2 | 0 | 1 |
| Clinical aspects of antimicrobial susceptibility testing | 1 | 0 | 1 |
| Laboratory Diagnosis of infectious diseases | 2 | 0 | 1 |
| Antiviral agents and resistance | 1 | 0 | 1 |
| Vaccines and antisera | 2 | 0 | 1 |
| Systemic mycoses | 2 | 0 | 1 |
| Zoonotic Diseases | 2 | 0 | 1 |
| Anaerobic infections including tetanus | 1 | 0 | 1 |
| Laboratory methods in Mycology | 0 | 2 | 1 |
| Microbiological approach to blood stream Infections | 2 | 0 | 2 |
| Microbiological approach to respiratory infections | 2 | 0 | 2 |
| Microbiological approach to cardiovascular diseases | 2 | 0 | 2 |
| Microbiology Laboratory Diagnostic Methods for respiratory infections-1 | 0 | 2 | 2 |
| Microbiology Laboratory Diagnostic Methods for respiratory infections-2 | 0 | 1 | 2 |
| Microbiological approach to gastrointestinal infections | 2 | 0 | 3 |
| Microbiological approach to urinary tracts infections | 1 | 0 | 4 |
| Microbiological approach to genital infections | 1 | 0 | 4 |
| Diagnostic Tests for Urinary and genital Specimens-1 | 0 | 2 | 4 |
| Diagnostic Tests for Urinary and genital Specimens-2 | 0 | 1 | 4 |
| Microbiological approach to CNS infections | 2 | 0 | 5 |
| Herpes Viruses | 2 | 0 | 5 |
| Persistent Viral Infections of the CNS and Prions | 1 | 0 | 5 |
| Arthropod-Borne and Other Zoonotic Viruses (including Rabies) | 1 | 0 | 5 |
| Superficial/Subcutaneous Mycosis | 2 | 0 | 6 |
| Exanthematous viral infections and mumps | 2 | 0 | 6 |
| Bacterial and Mycobacterial skin and soft tissue infections | 1 | 0 | 6 |

Family Medicine Department (Total 15 hrs)

| Lecture | Hour | | Committee |
|--|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Introduction to the Program of Family Medicine | 1 | 0 | 1 |
| Approach to fever in primary care | 1 | 0 | 1 |
| Approach to Patient with Chest Pain in Primary Care | 2 | 0 | 2 |
| Approach to respiratory symptoms in primary care | 1 | 0 | 2 |
| Approach to abdominal pain | 1 | 0 | 3 |
| Approach to gastrointestinal symptoms in primary care | 1 | 0 | 3 |
| Approach to breast diseases in primary care | 1 | 0 | 4 |
| Pregnancy follow-up in primary care | 1 | 0 | 4 |
| Approach to menopause and osteoporosis in primary care | 1 | 0 | 4 |
| Delivery of family planning services | 2 | 0 | 4 |
| Approach to depression in primary care | 1 | 0 | 5 |
| Approach to dementia primary care | 1 | 0 | 5 |
| Approach to headache in primary care | 1 | 0 | 5 |

Pathology Department (Total T: 110 hrs, P: 5 hrs)

| Lecture | Hour | | Committee |
|---|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Non/Hodgkin's Lymphoma I-II | 2 | 0 | 1 |
| Pathology of Bone Marrow -I-II | 2 | 0 | 1 |
| Pathology of Myeloproliferative Diseases I-II | 2 | 0 | 1 |
| Lymphoreactive Disease | 1 | 0 | 1 |
| Pathology of Spleen | 1 | 0 | 1 |
| Hodgkin's Lymphoma | 1 | 0 | 1 |
| Pathology of Mycobacterial Infections | 1 | 0 | 1 |
| Case discussions General Review of Pathology of Infections Disease | 2 | 0 | 1 |
| Pathology of Viral Infections I -II | 2 | 0 | 1 |
| Discussion | 2 | 0 | 1 |
| Myocardium | 1 | 0 | 2 |
| Ischemic Heart Disease I-II | 2 | 0 | 2 |
| Pathology of Endocardium & Heart Valves I-II | 2 | 0 | 2 |
| Rheumatic Heart Disease | 1 | 0 | 2 |
| CVS Tumors | 1 | 0 | 2 |

| | | | |
|---|---|---|---|
| Atherosclerosis & Hypertension I-II | 2 | 0 | 2 |
| Congestive Heart Failure | 1 | 0 | 2 |
| Congestive Heart Failure & Pericardium | 1 | 0 | 2 |
| Pulmonary Infections I-II | 2 | 0 | 2 |
| Chronic Obstructive Pulmonary Diseases | 1 | 0 | 2 |
| Asthma Bronchiale | 1 | 0 | 2 |
| Congenital Lung Anomalies & Atelectasis | 1 | 0 | 2 |
| Pathology of Upper Respiratory Tract | 1 | 0 | 2 |
| Tumors of the Respiratory System I-II | 2 | 0 | 2 |
| Pathology of Pleural and Mediastinal Diseases | 1 | 0 | 2 |
| Chronic Restrictive Pulmonary Diseases I-II | 2 | 0 | 2 |
| Congenital Heart Disease I-II | 2 | 0 | 2 |
| Pathology Laboratory (Cardiovascular and Respiratory Systems) | 0 | 1 | 2 |
| Oral Pathology | 1 | 0 | 3 |
| Pathology of Esophagus I-II | 2 | 0 | 3 |
| Pathology of Stomach I-II | 2 | 0 | 3 |
| Pathology of Liver I-II | 2 | 0 | 3 |
| Pathology of Appendix & Peritoneum | 1 | 0 | 3 |
| Pathology of Liver & Biliary System I-II-III-IV | 4 | 0 | 3 |
| Pathology of Intestinal Diseases I-II | 2 | 0 | 3 |
| Pathology Laboratory (Gastrointestinal System) | 0 | 1 | 3 |
| Pathology of Endocrine System: Introduction | 1 | 0 | 4 |
| Pathology of Pituitary Gland I-II | 2 | 0 | 4 |
| Pathology of Pancreas | 2 | 0 | 4 |
| Pathology of Adrenal Gland I-II | 2 | 0 | 4 |
| Pathology of Thyroid & Parathyroid I-II | 2 | 0 | 4 |
| Pathology of Vulva & Vagina | 1 | 0 | 4 |

| | | | |
|---|---|---|---|
| Pathology of Treponemal Infections | 1 | 0 | 4 |
| Pathology of Breast I-II | 2 | 0 | 4 |
| Renovascular Pathology | 1 | 0 | 4 |
| Renal Cystic Disease | 1 | 0 | 4 |
| Pathology of Urinary System Tumors | 1 | 0 | 4 |
| Congenital Anomalies of Urinary System | 1 | 0 | 4 |
| Pathology of Bladder | 1 | 0 | 4 |
| Pathology of Glomerular Diseases I-II-III | 3 | 0 | 4 |
| Pathology of Pregnancy & Placenta | 1 | 0 | 4 |
| Pathology of Ovary I-II | 2 | 0 | 4 |
| Pathology of Tubulointerstitial Disease I-II | 2 | 0 | 4 |
| Pathology of Uterus I-II | 2 | 0 | 4 |
| Pathology of Cervix Uteri I-II | 2 | 0 | 4 |
| Pathology of Male Genital System I-II | 2 | 0 | 4 |
| Pathology Laboratory (Urinary System) | 0 | 1 | 4 |
| Pathology of Myelin & Neuronal Storage Diseases I-II | 2 | 0 | 5 |
| Developmental Disorders of CNS | 1 | 0 | 5 |
| Neurodegenerative Disorders I-II | 2 | 0 | 5 |
| Cranial Trauma & Intracranial Hemorrhage I-II | 2 | 0 | 5 |
| Tumors of CNS I-II | 2 | 0 | 5 |
| Infectious Diseases of CNS I-II | 2 | 0 | 5 |
| Pathology Laboratory Nervous System | 0 | 1 | 5 |
| Congenital & Metabolic Diseases of Bone I-II | 2 | 0 | 6 |
| Degenerative Joint Disease | 1 | 0 | 6 |
| Tumors of Soft Tissues I-II | 2 | 0 | 6 |
| Bone and Joint Infections | 1 | 0 | 6 |
| Myopathies | 1 | 0 | 6 |
| Vasculitis I-II | 2 | 0 | 6 |
| Autopsy I-II | 2 | 0 | 6 |
| Bone Tumors I-II | 2 | 0 | 6 |
| Pathology Laboratory (Musculoskeletal System) | 0 | 1 | 6 |

Medical Biology Department (Total 1 hr)

| Lecture | Hour | | Committee |
|---------------------------------------|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Molecular Basis of Hemoglobinopathies | 1 | 0 | 1 |

Multi-case Discussion Panels (Total: 12 hrs)

| Lecture | Hour | | Committee |
|-----------------------------|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Multi-case Discussion Panel | 2 | 0 | 1 |
| Multi-case Discussion Panel | 2 | 0 | 2 |
| Multi-case Discussion Panel | 2 | 0 | 3 |
| Multi-case Discussion Panel | 2 | 0 | 4 |
| Multi-case Discussion Panel | 2 | 0 | 5 |
| Multi-case Discussion Panel | 2 | 0 | 6 |

Scientific Project (Total: 24 hrs)

| Lecture | Hour | | Committee |
|---------------------------------------|-------------|-----------|-----------|
| | Theoretical | Practical | |
| Scientific research and project -III | 4 | 0 | 1 |
| Scientific research and project - III | 8 | 0 | 2 |
| Scientific research and project - III | 2 | 0 | 3 |
| Scientific research and project -III | 4 | 0 | 4 |
| Scientific research and project - III | 2 | 0 | 5 |
| Scientific research and project -III | 4 | 0 | 6 |

| Course Learning Outcomes | Program Outcomes | Teaching Methods | Assessment Methods |
|--|---|------------------|--------------------|
| At the end of this phase, student should be able to: 1.0. recall anatomy, histology and physiology of body systems. | 1.1.1 | 1, 6 | A |
| 2.0. list necessities for prevention of clinical conditions' emergence, protection and improvement of health in healthy conditions in relation to body systems. | 1.1.1,1.1.3 | 1, 6 | A |
| 3.0. explain risk factors and etiopathogenesis, at multi-system level or related to a body system, of clinical conditions which are frequent in community and/or pose high risk for individual or community health, and/or life-threatening or constitute an emergency. | 1.1.1,,1.1.4 | 1, 6 | A |
| 4.0. at cellular or tissue level, 4.1. recognize morphological characteristics, 4.2. show basic pathological changes that occur in clinical conditions. | 1.1.1 | 1, 6 | A |
| 5.0. at multi-system level or related to a body system, of clinical conditions which are frequent in community and/or pose high risk for individual or community health, and/or life-threatening or constitute an emergency; 5.1. explain mechanisms of destruction at molecule, cell, tissue, organ, system, multi-system and organismal level, 5.2. describe structural and functional changes caused, 5.3. list clinical courses in time. | 1.1.1, 1.1.6 | 1, 6 | A |
| 6.0. explain mechanisms of emergence for frequently encountered; 6.1. clinical complaints, 6.2. symptoms, 6.3. signs, 6.4. laboratory and imaging findings of clinical conditions which are frequent in community and/or pose high risk for individual or community health, and/or life-threatening or constitute an emergency. | 1.1.6,1.1.8,2.4.1, 2.4.2, 2.5.1 | 1, 6 | A |
| 7.0. explain in an evidence-based manner and with performance measures from the aspects of reliability, practicality and outcomes, • health care processes, • acquisition of subjective or objective data, information and knowledge required for clinical decision making, • clinical decision making process, • clinical decisions and • clinical practices which are required for management at primary health care service level. 7.1. evaluation of emergency case (<i>sepsis and septic shock, dyspnea, acute abdominal pain, urological emergencies, neurological emergencies, trauma</i>) | 1.1.2, 1.1.5, 1.1.7, 1.1.8, 1.1.9, 2.1.1, 2.1.3, 2.1.4, 2.2.1, 2.2.2, 2.3.1, 2.3.2, 2.4.2, 2.4.3, 2.5.1, 2.5.2, 2.5.3 | 1, 6 | |

| | | | |
|--|--|--|--|
| <p>7.2. approach to healthy individual or patient (fever, cardiovascular disease, chest pain, cough and hemoptysis, dyspnea, anemia, lymphadenopathy, diarrhea, pregnancy, urinary tract infection, neurological symptoms, headache, depression, dementia, musculoskeletal dysfunction)</p> <p>7.3. making laboratory and imaging tests/examinations</p> <p>7.4. making preliminary diagnosis or definitive diagnosis decision</p> <p>7.5. making non-intervention or intervention decision</p> <p>7.6. referral/transport of healthy individual or patient</p> | | | |
|--|--|--|--|

| | |
|--|---|
| <p>Teaching/Learning Methods:</p> | <ul style="list-style-type: none"> • CONTACT HOURS (CH) <ul style="list-style-type: none"> 1. Theoretical-Class/Auditorium/Conference Hall/Multimedia <ul style="list-style-type: none"> 1. 1. Lecture/Tutorial 1. 2. Case report 1. 3. Case presentation 1. 4. Research seminar 1. 5. Seminar 1. 6. Student seminar/Journal club 1. 7. Invited speaker 1. 8. Hospital conference 1. 9. Online/Distance or e-learning (paper based or ICT based) 1. 10. Other: 2. Theoretical-Group Activity/Interactive <ul style="list-style-type: none"> 2. 1. Case discussion 2. 2. Discussion class 2. 3. Small group study session/Problem solving session/Brainstorm session 2. 4. Exercise class 2. 5. Oral presentation and criticism 2. 6. Panel |
|--|---|

| | |
|----|---|
| | <ul style="list-style-type: none"> 2. 7. Workshop 2. 8. Online/Distance or e-learning (paper based or ICT based) 2. 9. Other: |
| 3. | <ul style="list-style-type: none"> Practice Based-Laboratory/Class 3. 1. Demonstration class 3. 2. Laboratory teaching 3. 3. Clinical skills laboratory 3. 4. Small group study session/Problem solving session 3. 5. Exercise class 3. 6. Workshop (practical class) 3. 7. Other: |
| 4. | <ul style="list-style-type: none"> Clerkship (Clinical practice and training) 4. 1. Field study/Fieldwork 4. 2. Outpatient clinic 4. 3. Patient bedside 4. 4. Imaging round 4. 5. Laboratory round 4. 6. Work based practice 4. 7. Grand round 4. 8. Operating room 4. 9. Invasive Intervention room 4. 10. Night shift at ward 4. 11. Night shift at intensive care unit 4. 12. Night shift at emergency care unit 4. 13. Other: |
| 5. | <ul style="list-style-type: none"> Work placement/Internship (Clinical performance under supervision) 5. 1. Field study/Fieldwork 5. 2. Outpatient clinic 5. 3. Patient bedside 5. 4. Imaging round 5. 5. Laboratory round 5. 6. Work based practice 5. 7. Grand round 5. 8. Operating room 5. 9. Invasive intervention room 5. 10. Night shift at ward 5. 11. Night shift at intensive care unit 5. 12. Night shift at emergency care unit 5. 13. Other: |
| | <ul style="list-style-type: none"> • INDEPENDENT STUDY HOURS (ISH) |
| 6. | <ul style="list-style-type: none"> KNOWLEDGE (Levels: Knowledge, Comprehension, Application, Analysis, Synthesis, Evaluation) 6. 1. Theoretical/Written/Oral exam/s 6. 2. Presentation 6. 3. Seminar 6. 4. Discussion 6. 5. Session 6. 6. Research paper writing 6. 7. Project writing 6. 8. Report writing 6. 9. Dissertation writing 6. 10. Homework 6. 11. Investigation/Survey study 6. 12. Other: |
| 7. | <ul style="list-style-type: none"> SKILLS: (Levels: Imitation, Manipulation, Precision, Articulation, Naturalization) 7. 1. Oral/practical exam/s 7. 2. Presentation 7. 3. Seminar 7. 4. Discussion 7. 5. Session 7. 6. Exercise 7. 7. Workshop 7. 8. Imaging round 7. 9. Laboratory round 7. 10. Grand round 7. 11. Other: |
| 8. | <ul style="list-style-type: none"> ATTITUDES (Receiving, Responding, Valuing, Organization, Characterization) |

| | |
|----------------------------|---|
| | <p>8. 1. Questionnaire (self-assessment)</p> <p>8. 2. Paper case</p> <p>8. 3. Other:</p> <p>9. COMPETENCY (Doing/Making, Co-ordinating/Operating, Observing/Analysing/Listening to/ Controlling/Driving, Choosing/Communicating/Enhancing, Conceiving/Visioning/Foreseeing)</p> <p>9. 1. Portfolio preparation</p> <p>9. 2. Clinical performance at outpatient wards</p> <p>9. 3. Clinical performance at inpatient wards</p> <p>9. 4. Clinical performance at night shifts (ward, emergency care unit, intensive care unit)</p> <p>9. 5. Other: (e.g. mini-clinical exam, etc.)</p> <p>10. PROFICIENCY (Doing/Making, Co-ordinating/Operating, Observing/Analysing/Listening to/ Controlling/Driving, Choosing/Communicating/Enhancing, Conceiving/Visioning/Foreseeing)</p> <p>10. 1. Portfolio preparation</p> <p>10. 2. Clinical performance at outpatient wards</p> <p>10. 3. Clinical performance at inpatient wards</p> <p>10. 4. Clinical performance at night shifts (ward, emergency care unit, intensive care unit)</p> <p>10. 5. Other: (e.g. mini-clinical exam, etc.)</p> |
| Assessment Methods: | <p>A. Knowledge Assessment</p> <p>a. Written Exam (MCQ+EMQ+KQ) (F, S)</p> <p>b. Objectively Structured Oral Examination (S)</p> <p>c. Oral Examination (F)</p> <p>d. Other:</p> <p>B. Skills Assessment</p> <p>a. Practical Examination (F)</p> <p>b. Objectively Structured Practical Examination (S)</p> <p>c. Mini Clinical Examination (S)</p> <p>d. Other:</p> <p>C. Attitude Assessment</p> <p>a. Mini Clinical Examination (S)</p> <p>b. Questionnaire (self-assessment) (F)</p> <p>c. Paper case (S)</p> <p>d. Observation of behaviour (360°) (F, S)</p> <p>e. Other:</p> <p>D. Competency Assessment</p> <p>a. Mini Clinical Examination (S)</p> <p>b. Clerkship/Internship Guide/Checklist Assessment (F, S)</p> <p>c. Professional Portfolio Assessment (F)</p> <p>d. Presentation Performance Assessment (F)</p> <p>e. Seminar Performance Assessment (F)</p> <p>f. Project Writing Assessment (S)</p> <p>g. Other:</p> <p>E. Proficiency Assessment</p> <p>a. Mini Clinical Examination (S)</p> <p>b. Clerkship/Internship Guide/Checklist Assessment (F, S)</p> <p>c. Professional Portfolio Assessment (F)</p> <p>d. Presentation Performance Assessment (F)</p> <p>e. Seminar Performance Assessment (F)</p> <p>f. Other:</p> <p>*F: Formative, S: Summative</p> |

| COURSE CONTENT | | |
|----------------|--|---|
| Week | Topics | Study Materials |
| 1-6 | COMMITTEE I - INFECTIOUS DISEASES & HEMATOPOIETIC SYSTEM | Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, |
| | | Specificallydesigned phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials |
| 7 | Committee Exam | |
| 8-13 | COMMITTEE II - CARDIOVASCULAR & RESPIRATORY SYSTEMS | Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specificallydesigned phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials |
| 14 | Committee Exam | |
| 15-17 | COMMITTEE III - GASTROINTESTINAL SYSTEM | Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specificallydesigned phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials |
| 18 | Committee Exam | |
| 20-21 | Midterm Break | |
| 19 -26 | COMMITTEE IV - ENDOCRINE, REPRODUCTIVE & URINARY SYSTEMS | Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specificallydesigned phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials |
| 27 | Committee Exam | |
| 28-33 | COMMITTEE V - NERVOUS SYSTEM AND PYSCHIATRY | Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specificallydesigned phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials |
| 34 | Committee Exam | |

| | | |
|-------|---------------------------------------|--|
| 35-38 | COMMITTEE VI - MUSCULOSKELETAL SYSTEM | Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specifically designed phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials |
| 39 | Committee Exam | |
| 42 | Final Exam | |
| 45 | Incomplete Exam | |

RECOMMENDED SOURCES

Textbooks

- Biomedical Ethics & Deontology
- 1. Marcia Lewis, Carol D. Tampo. Medical Law, Ethics, & Bioethics for the Health Professions, F.A. Davis Publishing House, 2012, ISBN: 0803627068
- 2. Michael Boylan. Medical Ethics, Wiley-Blackwell Publishing House, 2013, ISBN: 978-1118494752
- Biostatistics
- 1. Pagano, Marcello, Gauvreau, Kimberlee. Principles of Biostatistics. Duxbury Press, 2000 ISBN 0534229026, 9780534229023.
- 2. Glantz, Stanton A. Primer of Biostatistics. 7th Edition. McGraw Hill Professional, 2011. ISBN 0071447814, 9780071447812.
- Infectious Diseases and Clinical Microbiology
- 1. Murray, Patrick R, Rosenthal, Ken S, Pfaller, Michael A. Medical Microbiology with STUDENT CONSULT Online Access. 8th Edition, 2016.
- Medical Genetics
- 1. Turnpenny, Peter D, Ellard, Sian. Emery's Elements of Medical Genetics. 14th Edition. Churchill Livingstone, 2012, ISBN: 9780702040436
- Neurosurgery
- 1. Microneurosurgery, Volume I to Volume V, Thieme Kindle Edition by Mahmut Gazi Yasargil (Author)
- 2. Neurology and Neurosurgery Illustrated, 5th Edition by Kenneth W. Lindsay PhD FRCS (Author), Ian Bone FRCP FACP (Author), Geraint Fuller MD FRCP (Author)
- 3. Handbook of Neurosurgery Feb 22, 2010 by Mark S. Greenberg
- Pharmacology
- 1. Harvey, Richard A. Lippincott's Illustrated Review of Pharmacology. 6th ed., Wolters Kluwer Health, 2015. ISBN: 978-1469887562.
- 2. Katzung, Bertram G., Masters, Susan B., Trevor Anthony J. Katzung's Basic & Clinical Pharmacology. 14th Edition. McGraw Hill Companies, 2017. ISBN: 978-1259641152.
- 3. Brunton, Laurence, Chabner, Bruce, Knollman, Bjorn. Goodman & Gilman's The Pharmacological Basis of Therapeutics. 13th Edition. McGraw Hill Companies, 2017. ISBN: 978-1259584732.
- Orthopedic Surgery
- 1. Ortopedik Fizik Muayane, çeviri ed. Uğur Şaylı, Güneş Tıp Kitabevi
- 2. Review of Orthopaedics, 6th edition (ed. Mark D. Miller)
- 3. AAOS Comprehensive Orthopaedic Review, 2nd edition (ed. Martin I. Boyer)
- Pathology
- 1. Abbas Aster, Kumar. Robbins Basic Pathology. 9th edition, Saunders, Elsevier Inc. 2013. ISBN: 978-0-8089-2432-6
- Psychiatry
- 1. Öztürk O. Ruh Sağlığı ve Bozuklukları. 2. Baskı, Ankara 2011. ISBN: 9786058617292
- 2. Sadock BJ, Sadock VA, Ruiz P. Kaplan & Sadock's Comprehensive Textbook of Psychiatry, 9. Ed. 2009, Lippincott Williams & Wilkins, PA, USA. ISBN: 9780781768993
- 3. Purves D, Augustine GJ, Fitzpatrick D. et al. Neuroscience. 5. Ed. 2012, Sinauer Assoc, Mass, USA. ISBN: 9780878936953
- General Surgery
- 1. Brunicaudi, F. Schwartz's Principles of Surgery, 10th edition, July 16, 2014, ISBN: 0071796754 / 9780071796750
- Urology
- 1. Campbell-Walsh Urology, 11th Edition 4-Volume Set. By Alan J. Wein, MD, FACS, PhD (hon), Louis R. Kavoussi, MD, Alan W. Partin, MD, PhD and Craig A. Peters, MD, FACS, FAAP. Imprint: Elsevier.

| | |
|-----------------------------|--|
| | ISBN: 978-1-4557-7567-5. Copyright: 2016 |
| Additional Resources | Each instructor will provide her/his notes to the students |

| MATERIAL SHARING | |
|-------------------------|---|
| Documents | Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos |
| Assignments | |
| Exams | After the exam; exam questions, question discussions, individual performance analysis reports |

| ASSESSMENTS |
|---|
| <p>Assessments table will be made with consideration of each learning objective for each committee and will be announced and explained in introductory lectures at the beginning of each committee.</p> <p style="text-align: center;">EXAMINATION MATRIX</p> <p>TS for students, who are exempted from FE = 97% of CMS + 3% of SRPCS</p> <p>TS for students, who are not exempted from FE= 97% of (60% of CMS + 40% of FES or ICES) + 3% of SRPCS</p> <p>SRPC: Scientific Research and Publication Course FES = Final Exam Score ICES = Incomplete Exam Score CMS = Average of CSs</p> |
| Professional (Knowledge and Skills: physiopathological processes, pathological processes; introduction to clinical practice-advanced clinical skills) |

| COURSES CONTRIBUTION TO PROGRAM | | | | | |
|--|--------------|---|---|---|---|
| COMPETENCE AREA-1 / Professional Practices | Contribution | | | | |
| COMPETENCE 1.1. Health Service Provider | 1 | 2 | 3 | 4 | 5 |
| Competency 1.1.1. Integrates knowledge, skills, and attitudes acquired from basic and clinical medical sciences, behavioral sciences, and social sciences to provide health services. | | | | | X |
| Competency 1.1.2. Demonstrates a biopsychosocial approach that considers the individual's sociodemographic and sociocultural background without discrimination based on language, religion, race, or gender in patient management. | X | | | | |
| Competency 1.1.3. Prioritizes the protection and improvement of individuals' and community's health in the delivery of healthcare services. | X | | | | |
| Competency 1.1.4. Performs the necessary actions in the direction of maintaining and improving the state of health as considering the individual, social, social and environmental factors affecting health. | X | | | | |
| Competency 1.1.5. Provides health education to healthy/ill individuals and their families, as well as to other healthcare professionals, by recognizing the characteristics, needs, and expectations of the target audience. | X | | | | |
| Competency 1.1.6. Demonstrates a safe, rational, and effective approach in the processes of protection, diagnosis, treatment, follow-up, and rehabilitation in health service delivery. | | X | | | |
| Competency 1.1.7. Performs interventional and/or non-interventional procedures safely and effectively for the patient in the processes of diagnosis, treatment, follow-up, and rehabilitation. | X | | | | |
| Competency 1.1.8. Provides healthcare services considering patient and employee health and safety. | | X | | | |
| Competency 1.1.9. Considers changes related to the physical and socio-economic environment at both regional and global scales that affect health, as well as changes in the individual characteristics and behaviors of those who seek healthcare services. | X | | | | |
| COMPETENCE AREA-2 / Professional Values and Approaches | Contribution | | | | |
| COMPETENCE 2.1. Adopting Professional Ethics and Principles | 1 | 2 | 3 | 4 | 5 |
| Competency 2.1.1. Considers good medical practices while performing the profession. | X | | | | |
| Competency 2.1.2. Fulfills duties and obligations within the framework of ethical principles, rights, and legal responsibilities required by the profession. | X | | | | |
| Competency 2.1.3. Demonstrates determined behavior in providing high-quality healthcare while considering the patient's integrity. | X | | | | |
| Competency 2.1.4. Evaluates own performance in professional practices by considering own emotions and cognitive characteristics. | X | | | | |
| COMPETENCE 2.2. Health Advocate | X | | | | |
| Competency 2.2.1. Advocates for the improvement of healthcare service delivery by considering the concepts of social accountability and social responsibility in the protection and enhancement of community health. | X | | | | |
| Competency 2.2.2. Plans and implements service delivery, education, and counseling processes related to individual and community health, in collaboration with all stakeholders, for the protection and improvement of health. | X | | | | |
| Competency 2.2.3. Evaluates the impact of health policies and practices on individual and community health indicators and advocates for the improvement of healthcare quality. | X | | | | |
| Competency 2.2.4. Gives importance to protecting and improving own physical, mental, and social health and takes necessary actions for it. | X | | | | |
| COMPETENCE 2.3. Leader-Manager | | | | | |

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|--|---------------------|----------|----------|----------|----------|
| Competency 2.3.1. Demonstrates exemplary behavior and leadership within the healthcare team during service delivery. | X | | | | |
| Competency 2.3.2. Utilizes resources in a cost-effective, socially beneficial, and compliant manner with regulations in the planning, implementation, and evaluation processes of healthcare services as the manager in the healthcare institution. | X | | | | |
| COMPETENCE 2.4. Team Member | X | | | | |
| Competency 2.4.1. Communicates effectively within the healthcare team and takes on different team roles as necessary. | X | | | | |
| Competency 2.4.2. Displays appropriate behaviors while being aware of the duties and responsibilities of healthcare workers within the healthcare team. | X | | | | |
| Competency 2.4.3. Works collaboratively and effectively with colleagues and other professional groups in professional practice. | X | | | | |
| COMPETENCE 2.5. Communicator | | | | | |
| Competency 2.5.1. Communicates effectively with patients, their families, healthcare professionals, and other occupational groups, institutions and organizations. | | X | | | |
| Competency 2.5.2. Communicates effectively with individuals and groups who require a special approach and have different sociocultural characteristics. | X | | | | |
| Competency 2.5.3. Demonstrates a patient-centered approach that involves the patient in decision-making mechanisms during the diagnosis, treatment, follow-up, and rehabilitation processes. | X | | | | |
| COMPETENCE AREA-3 / Professional and Personal Development | Contribution | | | | |
| COMPETENCE 3.1. Scientific and Analytical Approach | 1 | 2 | 3 | 4 | 5 |
| Competency 3.1.1. Plans and implements scientific research, as necessary, for the population it serves, and utilizes the results obtained, as well as those from other research, for the benefit of the community. | X | | | | |
| Competency 3.1.2. Accesses and critically evaluates current literature related to their profession. | X | | | | |
| Competency 3.1.3. Applies evidence-based medicine principles in the clinical decision-making process. | X | | | | |
| Competency 3.1.4. Uses information technologies to enhance the effectiveness of healthcare, research, and education activities. | X | | | | |
| COMPETENCE 3.2. Lifelong Learner | X | | | | |
| Competency 3.2.1. Manages effectively individual study processes and career development. | X | | | | |
| Competency 3.2.2. Demonstrates skills in acquiring, evaluating, integrating new information with existing knowledge, applying to professional situations, and adapting to changing conditions throughout professional career. | X | | | | |
| Competency 3.2.3. Selects the right learning resources to improve the quality of health care and organizes the learning process. | X | | | | |

| ECTS CREDITS MED 302 Introduction to Clinical Sciences | | | |
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| ACTIVITIES | Quantity/ day | Time (hour) | Workload (hour) |
| Lectures | 707 | 1 | 707 |
| Laboratory Practices | 17 | 1 | 17 |
| Scientific project writing | 20 | 2 | 40 |
| Independent Study for Midterm Exam | 402 | 1 | 402 |
| Midterm Exam (MCQ+EMQ) | 6 | 2 | 12 |
| Independent Study for Final Exam | 417 | 1 | 417 |
| Final Exam (MCQ) | 1 | 4 | 4 |
| Total Workload per Course | | | 1599 |
| ECTS Credits per Course | | | 53 |