

1<sup>st</sup> SEMESTER COURSE PLAN

Code	Course Title	*C	**A	Duration (Week)	ECTC
MED101	Basic Sciences Committee I	Yes	Yes	8	10
MED103	Basic Sciences Committee II	Yes	Yes	8	10
ATA111	Atatürk Principles and History of Turkish Revolution I	No	No	15	2
TRD111 / TRD 105	Turkish Language I / Turkish For Foreigners I	No	No	15	2
ENG113	Academic Reading and Writing I	No	No	15	3
KYP001	Career and Life Planning	Yes	No	15	1
Total :					28

2<sup>nd</sup> SEMESTER COURSE PLAN

Code	Course Title	*C	**A	Duration (Week)	ECTC
MED102	Basic Sciences Committee III	Yes	Yes	8	12
MED104	Basic Sciences Committee IV	Yes	Yes	9	13
ATA112	Atatürk Principles and History of Turkish Revolution II	No	No	15	2
TRD112/ TRD106	Turkish Language II / Turkish For Foreigners II	No	No	15	2
ENG114	Academic English Reading and Writing II	No	No	15	3
Total :					32

1<sup>st</sup> SEMESTER COURSE PLAN

Code	Course Title	*C	**A	Duration (Week)	ECTC
MED201	Cardiovascular and Respiratory Systems Committee	Yes	Yes	7	11
MED203	Gastrointestinal System and Metabolism Committee	Yes	Yes	8	12
ENG213	Academic Listening and Speaking I(for the faculty of medicine )	No	No	15	3
Total :					26

2<sup>nd</sup> SEMESTER COURSE PLAN

Code	Course Title	*C	**A	Duration (Week)	ECTC
MED202	Endocrine and Urogenital Systems Committee	Yes	Yes	5	10
MED204	Nervous System Committee	Yes	Yes	7	12
MED206	Biological Fundamentals of Diseases Committee	Yes	Yes	5	9
ENG214	Academic English Listening and Speaking II	No	No	15	3
Total :					34

1<sup>st</sup> SEMESTER COURSE PLAN

Code	Course Title	*C	**A	Duration (Week)	ECTC
MED301	Neoplasia and Hematopoietic Systems Diseases Committee	Yes	Yes	4	8
MED303	Microorganism and Their Diseases Committee	Yes	Yes	4	8
MED305	Cardiovascular and Respiratory Systems Diseases Committee	Yes	Yes	5	9
MED307	Gastrointestinal System Diseases Committee	Yes	Yes	4	8
Total :					33

2<sup>nd</sup> SEMESTER COURSE PLAN

Code	Course Title	*C	**A	Duration (Week)	ECTC
MED302	Urogenital and Endocrine System Diseases Committee	Yes	Yes	6	9
MED304	Neuroscience, Psichiary and Muscle Skeleton System Diseases Committee	Yes	Yes	6	10
MED306	Public Health, Forensic Medicine and Medical Ethics	Yes	Yes	4	8
Total :					27

**THE REPUBLIC OF TURKEY**  
**OKAN UNIVERSITY**  
**SCHOOL OF MEDICINE**  
**MEDEDU101 - FIRST CLASS COURSE CONTENT**

**FALL SEMESTER- COMMITTEE OUTSIDE COURSES**

**ATA101 Atatürk İlkeleri ve İnkılap Tarihi I ( T:2-U:0 ) Kredi:2**

Tarihin tanımı, Türk İnkılabını öğrenmenin amacı, Osmanlı İmparatorluğu, Fransız İhtilali, Düyun'u Umumiye İdaresi, Trablusgarp Savaşı, Ouchy (Uşi) Barış Antlaşması, Birinci Balkan Savaşı, Londra Barış Antlaşması, İkinci Balkan Savaşı, I.Birinci Dünya Savaşı, Osmanlı Devleti'nin savaştığı cepheler, Çanakkale ve Gelibolu Cephesi, Wilson Prensipleri, Birinci Dünya Savaşı'nı sona erdiren Ateşkes (Silah bırakma) Anlaşmaları, Mondros Ateşkes Anlaşması, Osmanlı Devleti'nin 623 yıllık süreçte yaşadığı dönemler, İşgal güçlerinin Anadolu'yu işgale başlaması, Zararlı cemiyetler, Ermeni konusu, Faydalı cemiyetler, İstanbul'un işgali, Tutuklamalar ve Malta'ya sürgünler, Mustafa Kemal Paşa'nın İstanbul'da görüştüğü silah arkadaşları, Görüştüğü devlet adamları, Paris Barış Konferansı, I. Dünya Savaşı sonunda imzalanan Barış Antlaşmaları, İzmir'in işgali, Bandırma Vapuru, Samsundaki çalışmalar, Havza Genelgesi, Ulusal Kurtuluş Mücadelesinin Stratejisi, Amasya Tamimi, Erzurum Kongresi, Sivas Kongresi, Diğer illerde yapılan kongreler, Heyeti Temsiliye, 1920 yılının önemli olayları, TBMM'nin açılışı, Ulusal Egemenlik ve Çocuk Bayramı, TBMM, San – Remo Konferansı, Sevr Barış Antlaşması, İç isyanlar (Ayaklanmalar), Hıyanet-i Vataniye Kanunu ve İstiklal Mahkemeleri, İstanbul Harp Divanı, Kurtuluş Savaşı diğer bir söylemle İstiklal Savaşı, Kuvayı millîye (Ulusal Kuvvetler) Dönemi, Muharebeler, Tekalif-i Milliye (Ulusal Yükümlülük) Emirleri, Genel Seferberlik ilanı, Büyük Taarruz ve Başkomutan Muharebesi, Kurtuluş Savaşı, Mudanya Mütarekesi (Ateşkes Anlaşması), Lozan Barış Antlaşması, İstanbul'un Kurtuluşu, Cumhuriyetin ilanını, Saltanatın Kaldırılması, Devrim hareketleri, 1921 Anayasası, Cumhurbaşkanlığı seçimi, Kurulan ilk Türkiye Cumhuriyeti Hükümeti.

**Ders kitabı:**

- Cumhuriyet Yolunun Kilometre Taşları, Okan Üniv. Yayını, Papatya Yayıncılı, 2008.
- Tarihim ve Ben–Ulusal Bağımsızlık Savaşı ve Lozan -İkinci Kitap, Artes Yayını, 2012.
- Tarihim ve Ben–Atatürk İlkeleri ve Devrimleri-Üçüncü Kitap, Artes Yayını.
- Söylev (Nutuk), Hazırlayan Dr. Mehmet Kılıç, Artes Yayınları.

**ENG113 Academic Reading & Writing I (T: 2-U: 2) Kredi: 3**

Unit 1: "Power and Responsibility", Unit 2: "Appearances", Unit 3: "Growing Up" (What Important Lessons do we Learn as Children?), Unit 4: "Health: How does the Environment affect our Health?", Medical English: Communication between doctor and patient, doctor and staff, and challenges facing doctors,

**Reference Textbook:**

- Q. Skills for Success/Reading & Writing 4

**HCI101 Health and Cinema (T: 2-U: 0) Kredi: 2**

Watching of health-related movies (14 movies) and making their criticism.

**HMA101 Health Management (T: 2-U: 0) Kredi: 2**

Repeat of management concept and functions, determine the place in health management with practice.

The definition, classification and characteristics of health services.

Characteristics, stages and developments of health care services and institutions.

Health management in Turkey.

**Books and readings;**

- Introduction to Health Care Management, by Sharon B. Buchbinder (Author), Nancy H. Shanks (Author), ISBN-13: 978-0763790868 ISBN-10: 0763790869 Edition: 2<sup>nd</sup>
- Sağlık İşletmelerinde Yönetim, Prof.Dr. Dilaver Tengilimoğlu ve ark., Nobel Yayınları, 2. Baskı, İstanbul, 2009.

### **TRD101 Türk Dili I ( T:2-U:0 ) Kredi:2**

Ders izlencesi, Dersin içeriğinin tartışılması, Dilin tanımı, dilin doğuşu, dil-düşünce/dil-edebiyat, dil-iletişim/dil-kültür ilişkisi, İletişim ve öğeleri; iletişim türleri, Beden dili, Dilin türleri ve dünya dilleri, Dünya dilleri içinde Türkçenin yeri, Türkçenin tarihi, Türklerin kullandığı alfabeler, Türkçenin konuşma kuralları; vurgu ve ses sağlığı, Ses bilgisi, olayları ve uyumları, Metin üzerinde konu ve temel ileti saptama, Anlatım biçimleri, öznel ve nesnel anlatımın özellikleri, Paragrafta düşünceyi geliştirme yolları.

#### **Ders kitabı:**

- Çotuksöken, Y., 2008, Üniversite Öğrencileri İçin Uygulamalı Türk Dili, güncellenmiş baskı, Papatya Yayıncılık, İstanbul.

### **KYP001 Career Life (T:0 -U:2 ) Kredi: 1**

Öğrencilerin üniversite eğitimlerinden beklentilerini belirlemelerini, bu süreci daha verimli değerlendirmelerini ve kendilerini geliştirmelerini sağlamaktır. Üniversitenin ilk yıllarından itibaren iş yaşamını tanıyarak eğitimleri boyunca kendilerini bu hayata hazırlayacak olanakları değerlendirmeleri hedeflemektir. (Staj, yarı zamanlı çalışma, seminer/kongre katılımları, proje geliştirme, şirket yarışmaları vb.) Kişisel farkındalık, kendi potansiyelini keşfetmek, tutum ve davranışlarını daha iyi anlamak, üniversite hayatı dinamikleri, iş dünyasına hazır olmak için mezun olmadan yapılması gerekenler, iş dünyasına hazır olmak için geliştirilmesi gereken beceri ve yetkinlikler, hedef koymak, kişisel vizyon oluşturmak, hedefe ulaşmak için inisiyatif (proaktif olmak), bir üniversiteli olarak kişisel imaj, iletişim, iletişim – uygulama, zaman yönetimi, stres yönetimi

### **MED 101 COMMITTEE I**

#### **Behavioral Science**

This course introduces students behaviour-based knowledges and principles in studying the behaviour of individuals, groups, and societies. This course surveys knowledges stemming from disciplines of psychology, social psychology, health psychology, and medical sociology. A number of topics that are of broad interest and importance are selected, and they are viewed as fundamental issues for behavioural scientists: interpersonal relationships, behaviour at work, and health and illness. This course aims to study basic knowledges and principles stemming from disciplines of psychology, social psychology, health psychology, and medical sociology, and it also aims to examine behaviour of the individual, interpersonal relationships, behaviour at work, health and illness behaviour.

#### **Medical Biochemistry**

The courses of Medical Biochemistry describes the chemical foundations of the human organism. As the chemistry of living organisms is organized around the C-atom the study of biochemistry must be built upon a study of the fundamentals of organic chemistry. The courses attempt to close the gap between organic chemistry and biochemistry. With this aim, a brief knowledge of basic organic chemistry on the chemical bonds, functional groups and chemical reactions of C-compounds is given.

Subsequently, the structures of universal set of small molecules and macromolecules present in cells are described. Since structure is fundamental to everything else the chief concern is the structure-function relation. Basic biochemical knowledge is essential for understanding the biomedical significance and clinical utility. Of all biomolecules, proteins which are the substances of life are ranked first. The structures of these enormously complicated molecules are worked out resting on the basic principles of organic structural theory : the concepts of bond angle and bond length, group size and shape, hydrogen bonding, resonance, acidity and basicity, optical activity, configuration and conformation.

#### **Medical Biology and Genetics**

Introduction to Medical Biology and Genetics, Biological molecules, Cell, Cellular Structures, Organelles  
Cytoskeleton, DNA structure and function, Extracellular matrix, Membrane transport, DNA replication, DNA repair, Recombination, RNA structure, Transcriptional regulation.

#### **Medical History and Ethics**

- Being a doctor (Conference)
- Principal Features of Medical Ethics.
- WHO Medical Ethics Principles.
- Definition of health professions in medicine.
- Patient's Rights and Regulations
- Definition of Malpractice.
- Discussion of Malpractice applications with Case studies.
- Anatomy's masterminds (Andreas Vesalius, Leonardo Da Vinci)
- Hippocrates and Hippocrates medicine
- Galen of Pergamon
- Bu Meslekten in Middle East
- Turkish Medical Association, Turkish Ministry of Health Central Ethics Committee

Evrakın elektronik imzalı suretine <http://e-belge.okan.edu.tr> adresinden 88a27613-689a-47b8-89dc-cd5317c106dd kodu ile erişebilirsiniz.

Bu Meslekten in Middle East

## Public Health

The principles and concepts of Public Health / Review of important health issues / Primary Health Care / Health indicators, demographics / Epidemiology (In Turkey, Children's health, elderly health, chronic diseases, mental health, sexually transmitted diseases, infectious diseases...) / Environmental Health / nutrition / Development of Health.

## Biophysics

- Atoms, molecules and matter
- Water as a living environment
- Physical characteristics of membrane structure and function
- Membrane proteins

## MED 103 COMMITTEE II

### Behavioral Science

This course introduces students behaviour-based knowledges and principles in studying the behaviour of individuals, groups, and societies. This course surveys knowledges stemming from disciplines of psychology, social psychology, health psychology, and medical sociology. A number of topics that are of broad interest and importance are selected, and they are viewed as fundamental issues for behavioural scientists: interpersonal relationships, behaviour at work, and health and illness. This course aims to study basic knowledges and principles stemming from disciplines of psychology, social psychology, health psychology, and medical sociology, and it also aims to examine behaviour of the individual, interpersonal relationships, behaviour at work, health and illness behaviour.

### Biophysics

- Diffusion and facilitated transport: Physical principles
- Diffusion and facilitated transport: Physical principles
- Active transport and secondary active transport
- Hydrodynamics, Magnetic Resonance Imaging, Magnetic Resonance.

### Medical Biochemistry

The three-dimensional structure of a protein is an important part of understanding how the protein functions. Proteins are dynamic molecules whose functions almost invariably depend on interactions with other molecules. **Firstly**, the proteins of oxygen transport, hemoglobin and myoglobin are described. **Secondly**, the major connective tissue protein collagen is described. **Thirdly**, the reaction catalysts of biological systems : the enzymes, the most remarkable and highly specialized proteins are described . **Fourthly**, carbohydrates, the most abundant biomolecules on earth are studied. **Lastly**, lipids a chemically diverse group of compounds with diverse biological functions are described.

### Medical Biology and Genetics

Genetic codes / tRNA, rRNA, Posttranscriptional regulation, Protein synthesis, Human genome organization, Mutagens, Mutagenesis, DNA repair systems, Genetic control mechanisms.

### Medical History and Ethics

- Being a doctor (Conference)
- Principal Features of Medical Ethics.
- WHO Medical Ethics Principles.
- Definition of health professions in medicine.
- Patient's Rights and Regulations
- Definition of Malpractice.
- Discussion of Malpractice applications with Case studies.
- Anatomy's masterminds (Andreas Vesalius, Leonardo Da Vinci)
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## **Public Health**

Introduces and focuses the history, issues, function and context of public health, community health, health systems, determinants of health and disease, health economics and Global Health.

Unit 1: Scope and functions of Public Health and Preventive Medicine

Unit 2: Environment-Human-Health Relationship

Unit 3: Health Care Services

Unit 4: Primary Health Care

Unit 5: Social Determinants of Health

Unit 6: Factors Affecting Health Child and Mother Health Status

Unit 7: Health Economics, Basic Definitions

Unit 8: Financing Health Care Services

Unit 9: Introduction to International Public Health

Unit 10: Communicable Disease Control

Unit 11: Nutritional Health

Unit 12: Health Promotion

**Readings:** Oxford Textbook of Public Health (5th edition)

Maxcy-Rosenau Public Health and Preventive Medicine (11th Edition)

## **SPRING SEMESTER- COMMITTEE OUTSIDE COURSES**

### **ATA102 Atatürk İlkeleri ve İnkılap Tarihi II ( T:2-U:0 ) Kredi:2**

Atatürk İlkeleri ve İnkılap Tarihi ile ilgili temel kavramlar. Sanayi Devrimi ve Fransız Devrimi, Osmanlı Devleti'nin dağılışı (XIX. Yüzyıl), Tanzimat ve İslahat Fermanı, I. Ve II. Meşrutiyet, Trablusgarp ve Balkan Savaşları, I. Dünya Savaşı, Mondros Ateşkes Antlaşması, Wilson İlkeleri, Paris Konferansı, M. Kemal'in Samsun'a çıkışı ve Anadolu'daki Durum, Amasya Genelgesi, Ulusal Kongreler, Mebusan Meclisi'nin açılışı, TBMM'nin Kuruluşu ve İç İsyanlar, Teşkilat-ı Esasi Kanunu, Düzenli Ordu'nun Kuruluşu, I. İnönü Meydan Muharebesi, II. İnönü Meydan Muharebesi, Kütahya – Eskişehir Meydan Muharebesi, Sakarya Meydan Muharebesi, Büyük Taarruz, Kurtuluş Savaşı sırasındaki antlaşmalar, Lozan Antlaşması, Saltanatın Kaldırılması, Doğu Cephesi, Ermeniler ile mücadele ve Gümrü Antlaşması, Batı Cephesi, İnönü Savaşı, Sakarya ve Dumlupınar, Mudanya Antlaşması ve saltanatın sonu, Lozan Barış Konferansı ve Cumhuriyet'in ilanı, Eğitim ve kültür alanında yenilikler, Musul sorunu, Çok partili sistem deneyimi.

### **TRD102 Türk Dili II ( T:2-U:0 ) Kredi:2**

Ders izlencesi, Dersin içeriğinin tartışılması, Metin türleri: Öğretici metinler, Metin türleri: Sanatsal metinler, Sözcükte anlam ve anlam olayları, Biçim bilgisi: Ekler ve kökler, Biçim bilgisi: Sözcük türleri ve sözcükte yapı, Yazım kuralları, Noktalama işaretleri, Cümle bilgisi: Cümlenin öğeleri, Cümle bilgisi: Cümle türleri, Anlatım bozuklukları: Sözcük düzeyinde bozukluklar, Anlatım bozuklukları: Cümle düzeyinde bozukluklar.

#### **Ders kitabı:**

- Çotuksöken,Y., 2008,Üniversite Öğrencileri İçin Uygulamalı Türk Dili, güncellenmiş baskı, Papatya Yayıncılık, İstanbul.

### **ENG114 Academic Reading & Writing II ( T:2-U:2 ) Kredi:3**

Unit 5: "The Science of Food: Should Science Influence what we Eat", Unit 6:"The Science of Food: Should Science Influence what we Eat", Unit 7: "Work and Education: Does School Prepare You for Work?", Unit 8: "Discovery: Is Discovery always a Good Thing?", Medical English Reading/Vocabulary: Chronic etc. Acute Illnesses, Reading/Vocabulary: Cancer, Reading/Vocabulary: Diabetes, Reading/Vocabulary: Heart Disease, Medical English

Side Presentation: Cosmetic Surgery, Reading Articles on Cosmetic Surgery, Vocabulary: Medical Terminology, 2.Slide Presentation on Euthanasia, Reading Articles on Euthanasia

Vocabulary: Medical Terminology, 3.Slide Presentation on Organ Donation, Reading Articles on Organ Donation.

#### **Reference Textbook:**

- Q: Skills for Success / Reading & Writing 4

## MED 102 COMMITTEE III

### Anatomy

Introduction and termination of the Anatomy, General consideration of the bones and muscles, Skull:Neurocranium, Skull: Splanchnocranium, Vertebral column, Upper extremity and thorax, Lower extremity and pelvis

### Behavioral Science

This course introduces students behaviour-based knowledges and principles in studying the behaviour of individuals, groups, and societies. This course surveys knowledges stemming from disciplines of psychology, social psychology, health psychology, and medical sociology. A number of topics that are of broad interest and importance are selected, and they are viewed as fundamental issues for behavioural scientists: interpersonal relationships, behaviour at work, and health and illness. This course aims to study basic knowledges and principles stemming from disciplines of psychology, social psychology, health psychology, and medical sociology, and it also aims to examine behaviour of the individual, interpersonal relationships, behaviour at work, health and illness behaviour.

### Biostatistics

- Describe the characteristics of different types of variables (e.g. nominal, ordinal, continuous, etc.)
- Calculate and interpret descriptive statistics: mean median, mode, range, percentiles, variance, standard deviation, etc.
- Coefficient of variation
- Probability theory
- Select appropriate z and t values based on the width of a desired confidence interval
- Differentiate between the “null” and “alternative” hypothesis.
- Understand and interpret parameters used in hypothesis testing (level of significance, p-value).
- Calculate and interpret sample hypotheses: a) One-sample - continuous outcome
- Calculate and interpret 2 sample hypotheses:
  - a) 2 sample – continuous outcome
  - b) 2 sample dichotomous outcome
- Calculate and interpret non-parametric tests:
  - a) 2 independent samples – Mann Whitney U Test
  - b) Paired samples – Wilcoxon Test

### Histology and Embryology

Cell Structure, Histochemical Methods and Basic Principles, Cell Structure: Organelles and Inclusions  
Cell Structure: Cytoskeleton, Cell Cycle, Division and Cell Death, Gametogenesis, Early Embryogenesis,  
Epithelial Tissue Histology, Connective Tissue, Muscle Tissue, Nervous Tissue

### Medical Biochemistry

Vitamins and minerals are required for a variety of biochemical functions including enzymatic action. **Firstly**, fat-soluble and water soluble vitamins are described individually. **Secondly** biological significance of macrominerals : calcium, magnesium, phosphorus, sodium, potassium, chloride and trace elements: iron, copper and zinc are described. **Thirdly**, biological energy transductions, the chemical and physical laws that govern biological processes and the central role of high energy phosphates in energy capture and transfer are described. **Lastly**, the composition, architecture and the remarkable dynamic features of membranes are described.

### Medical Biology and Genetics

Mendelian genetics-I, Mendelian genetics-II, Non-Mendelian genetics, DNA Technology, Molecular techniques, Population genetics, Chromosomes, Chromosome abnormalities and disorders, Genetic counselling.

### Laboratory Courses:

- Introduction to Medical Biology and Genetics instruments.
- DNA isolation from whole blood.
- Plasmid isolation from Bacteria.

### Physiology

- Introduction and Homeostasis
- The Cell and Its Functions
- Body Fluids and Compartments
- Cell Membrane and Transport of Substances
- Membranes Potentials and Action Potentials – I
- Membranes Potentials and Action Potentials – II

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## Medical History and Ethics

- Being a doctor (Conference)
- Principal Features of Medical Ethics.
- WHO Medical Ethics Principles.
- Definition of health professions in medicine.
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- Definition of Malpractice.
- Discussion of Malpractice applications with Case studies.
- Anatomy's masterminds (Andreas Vesalius, Leonardo Da Vinci)
- Hippocrates and Hippocrates medicine
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## MED 104 COMMITTEE IV

### Anatomy

Muscles and joints general consideration, Superficial back musc.and posterior aspect of arm and shoulder joint, Anterior aspect of the arm and forearm pectoral region, Axilla, and brachial plexus, Posterior aspect of the forearm,elbow joint, Hand, wrist joint, Gluteal region and hip joint, Poste.aspect of the thigh and knee joint, Anterior and medial aspect of thigh, Anterior and .lateral asp.of leg and ank.joint, Posterior aspect of the leg and popliteal fossa, Foot, Anterior and lateral aspect of the neck, Temporal and parotid region, Infratemporal and pterygopalatine fossa, Suboccipital region and deep muscles of the back.

### Behavioral Science

This course introduces students behaviour-based knowledges and principles in studying the behaviour of individuals, groups, and societies. This course surveys knowledges stemming from disciplines of psychology, social psychology, health psychology, and medical sociology. A number of topics that are of broad interest and importance are selected, and they are viewed as fundamental issues for behavioural scientists: interpersonal relationships, behaviour at work, and health and illness. This course aims to study basic knowledges and principles stemming from disciplines of psychology, social psychology, health psychology, and medical sociology, and it also aims to examine behaviour of the individual, interpersonal relationships, behaviour at work, health and illness behaviour.

### Biostatistics

- Describe the characteristics of different types of variables (e.g. nominal, ordinal, continuous, etc.)
- Calculate and interpret descriptive statistics: mean median, mode, range, percentiles, variance, standard deviation, etc.
- Coefficient of variation
- Probability theory
- Select appropriate z and t values based on the width of a desired confidence interval
- Differentiate between the "null" and "alternative" hypothesis.
- Understand and interpret parameters used in hypothesis testing (level of significance, p-value).
- Calculate and interpret sample hypotheses: a) One-sample - continuous outcome
- Calculate and interpret 2 sample hypotheses:
  - a) 2 sample – continuous outcome
  - b) 2 sample dichotomous outcome
- Calculate and interpret non-parametric tests:
  - a) 2 independent samples – Mann Whitney U Test
  - b) Paired samples – Wilcoxon Test

### First Aid

Introduction to first Aid, Victim Assessment (Checking an unconscious victim / Checking conscious victims), Respiratory Emergencies (Conscious choking- Rescue breathing), Cardiac Emergencies and Unconscious choking(Causes of cardiac difficulties, Method and procedure of CPR / Adult/ Child/ Infant), Bleeding and Shock , Injuries (Soft tissue, Musculoskeletal Injuries to extremities, Splinting, Head, Neck, Back, Chest, Abdomen, and Pelvic injuries), Sudden Illness (Fainting, Diabetic emergencies, Seizure, Shock or transient ischemic attack, Care), Poisoning (Definition, Causes, Ingested poisons, Inhaled poisons, Contact Poisons, Substance abuse and misuse), Bites and Stings, Heat and cold related emergencies

### Reference Textbook:

Okan Üniversitesi İlk Yardım Eğitim Merkezi ders notları.

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**Histology and Embryology**

Cell Structure, Histochemical Methods and Basic Principles, Cell Structure: Organelles and Inclusions  
Cell Structure: Cytoskeleton, Cell Cycle, Division and Cell Death, Gametogenesis, Early Embryogenesis,  
Epithelial Tissue Histology, Connective Tissue, Muscle Tissue, Nervous Tissue

**Medical Biology and Genetics**

Genetic diseases, Cell division, Cell cycle regulation, Mitosis, meiosis, Cell death and regulation, Gene therapy, Techniques used in Genetics, Biotechnology, Cancer genetics, Immunogenetics.

**Laboratory Courses:**

- Restriction Enzyme usage.
- Polymerase Chain Reaction.
- Examination of microscope slides of apoptosis, cell division, chromosomes, mitosis and meiosis.

**Medical Biochemistry**

**Firstly**, the solute transport mechanisms and transmission of various signals across membranes are described. **Secondly**, the enzymes functioning in biological oxidation are described. **Thirdly**, the elements of respiratory chain and the process of oxidative phosphorylation are described

**Physiology**

- Physiology of Skeletal Muscle
- Neuromuscular Transmission and Excitation-Contraction Coupling
- Smooth Muscle Physiology
- Synaptic Transmission and Receptors
- Physiology of Nervous System -I- II-III

**THE REPUBLIC OF TURKEY  
OKAN UNIVERSITY  
SCHOOL OF MEDICINE  
PHASE 2 COURSE CONTENT**

**FALL SEMESTER- COMMITTEE OUTSIDE COURSES**

**ENG213 Academic English Listening and Speaking I ( T:2-U:2 ) Credit:3**

The purpose of this course is to enhance the speaking and listening skills of non-native English speakers. Emphasis is on pronunciation, stress, rhythm, and intonation patterns of American English. Oral communication, listening comprehension, and vocabulary development are stressed. Students build their skills through instruction and intensive practice.

**Book required:**

Q: Skills for Success / Listening & Speaking 3 (Oxford)

**COMMITTEE COURSES**

**MED201 – CARDIOVASCULAR AND RESPIRATORY COMMITTEE**

**Anatomy**

The purpose of this course is to gain basic anatomical knowledge of cardiovascular and respiratory systems. Recognize the general patterns of muscles and other structures of the roots of the neck. At the end of the course, student is able to describe the anatomical features of heart, lungs, visceral and parietal coverings, mediastinum, nose, diaphragm, pharynx, larynx and trachea.

**Physiology**

The purpose of this course is to provide sufficient information regarding the physiology of organ systems in human body. The goal is to explain physiologic mechanisms of particular systems and their functions.

**Histology & Embryology**

The purpose of this course is to provide sufficient information regarding the histology and embryology of organ systems in human body. The goal is to explain histological structure of particular systems and their functions. In addition, embryology sessions explain the development/formation periods, molecules that regulate the developmental pathways and anomalies included in this process.

**Medical Biochemistry**

The purpose of this course is to describe the roles of plasma proteins, including immunoglobulins, to define the acute phase response and the change it induces in the concentrations of circulating plasma proteins; the biochemical pathways for synthesis and degradation of heme , the biochemical characteristics of porphyrias and jaundices and finally the biochemistry of erythrocytes

**Medical Microbiology**

The purpose of this course is to describe basics of medical microbiology.

For this purpose, basic headings of medical microbiology such as, culturing, staining, principles of sterilization and disinfection, antimicrobials will be described and discussed.

**MED 203 - GASTROINTESTINAL SYSTEM AND METABOLISM COMMITTEE**

**Anatomy**

The purpose of this course is to identify and illustrate the gastrointestinal system anatomy, recognize the patterns of mimic muscles and the parts of the gastrointestinal tract. At the end of the course, student is able to describe the anatomical features of mimic muscles, oral cavity, salivary glands, temporomandibular joint and muscles of mastication, anterior abdominal wall and the inguinal canal, peritoneum, oesophagus and the stomach, duodenum, small and large intestine, rectum and anal canal, liver, gall bladder and the biliary ducts, pancreas and spleen, vessels and nerves of the digestive tract and the portal system, the posterior abdominal wall and the great vessels.

**Histology and Embryology**

The purpose of this course is to provide sufficient information regarding the histology and embryology of organ systems in human body. The goal is to explain histological structure of particular systems and their functions. In addition, embryology sessions explain the development/formation periods, molecules that regulate the developmental pathways and anomalies included in this process.

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### **Medical Biochemistry**

The purpose of this course is to describe how carbohydrates, lipids and proteins are metabolized , how these metabolic pathways are regulated. The clinical situations that arise from the derangements metabolism are also briefly described.

### **Medical Microbiology**

The purpose of this course is to describe immunology and some bacteria causing human disease.

For this purpose all components of the immune system will be reviewed. Immun response, hypersensitivity reactions and diagnostic immunologic tests will be described.

Some of the bacteria causing infectious diseases will be discussed by describing the agent and defining the clinical presentations, diagnosis and treatment of these infectious diseases.

### **Physiology**

The purpose of this course is to provide sufficient information regarding the physiology of organ systems in human body. The goal is to explain physiologic mechanisms of particular systems and their functions.

## **SPRING SEMESTER- COMMITTEE OUTSIDE COURSES**

### **ENG214 Academic English Listening and Speaking I ( T:2-U:2 ) Credit:3**

The purpose of this course is to improve students' listening and speaking skills. Students learn new vocabulary, expressions and ideas related to the topic of each unit.

#### **Book required:**

Q: Skills for Success / Reading & Writing 4 (Oxford)

### **KYP001 Career Life (T:0 -U:2 ) Credit: 1**

Students to determine their expectations of their university education, this process is to ensure more efficient evaluation and development themselves. Since the first years of university education throughout life by recognizing the business is targeting opportunities assessment to prepare themselves for life. (Internship, part-time work, seminar / conference attendance, project development, corporate competition and so on.) Personal awareness, to explore their own potential, to better understand the attitudes and behavior of college life dynamics, needs to be done before graduation to get ready for the business world, the business world skills and competencies to be developed to be ready, put the goal is to create a personal vision, initiatives to reach the goal (be proactive), personal image as a college, communication, communication - application, time management, stress management

## **COMMITTEE COURSES**

### **MED202 - ENDOCRINE & UROGENITAL SYSTEM COMMITTEE**

#### **Anatomy**

The purpose of this course is to gain the necessary skill and knowledge on the anatomy of the endocrine urogenital systems.

#### **Histology & Embryology**

The purpose of this course is to provide sufficient information regarding the histology and embryology of organ systems in human body. The goal is to explain histological structure of particular systems and their functions. In addition, embryology sessions explain the development/formation periods, molecules that regulate the developmental pathways and anomalies included in this process.

#### **Medical Biochemistry**

The purpose of this course is to give information on endocrine biochemistry, body water and electrolytes, acid-base control and acid-base disorders and renal function

#### **Medical Microbiology**

The purpose of this course is to describe some bacteria and fungi causing infectious diseases.

To review these subjects, the agent will be described and the clinical presentations, diagnosis and treatment of these infectious diseases will be defined.

#### **Physiology**

The purpose of this course is to provide sufficient information regarding the physiology of organ systems in human body. The goal is to explain physiologic mechanisms of particular systems and their functions.

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## **MED204 - NERVOUS SYSTEM COMMITTEE**

### **Anatomy**

The purpose of this course is to gain the necessary skill and knowledge on the anatomy of the endocrine urogenital systems.

### **Histology & Embryology**

The purpose of this course is to provide sufficient information regarding the histology and embryology of organ systems in human body. The goal is to explain histological structure of particular systems and their functions. In addition, embryology sessions explain the development/formation periods, molecules that regulate the developmental pathways and anomalies included in this process.

### **Medical Biochemistry**

The purpose of this course is to give information on cerebrospinal fluid and the neurotransmitter systems in the central nervous system including the functions of norepinehrine, dopamine, acetylcholine, serotonin, GABA and glutamate

### **Medical Microbiology**

The purpose of this course is to describe general characteristics of viruses, classify the viruses and to define the infections caused by the viruses. Clinical presentations, diagnosis and treatment of viral diseases.

### **Physiology**

The purpose of this course is to provide sufficient information regarding the physiology of organ systems in human body. The goal is to explain physiologic mechanisms of particular systems and their functions.

## **MED206 – BIOLOGICAL FUNDAMENTALS OF DISEASES I COMMITTEE**

### **Clinical Biochemistry**

The purpose of this course is to give information on inborn errors of metabolism; on clinical application of enzymes; on free radicals, antioxidants and oxidative stress; on the effects of mitochondrial DNA mutations and on the relationship of type 2 diabetes mellitus with obesity and the metabolic syndrome. Finally a biochemical approach to aging is presented.

### **Medical Microbiology**

The purpose of this course is to describe the parasitic infections. The causes of human parasitic infections, their characteristics and the clinical manifestations will be reviewed.

### **Medical Pharmacology**

The purpose of this course is to give students knowledge of basic medicine. The student learn definition of drug, pharmaceutical forms, routes of administration, the absorption of the applied changes on the body and the basic concepts related to excretion during the course of processing. In addition, the students gain knowledge about of the concept of receptor and post-receptor events and mechanisms of action of drugs. Students taking the course will learn the rules of pharmacokinetics and pharmacodynamics in general before examining specific groups of drugs. They will have information about principles of prescribing, the rational use of medicines, pharmacovigilance and pharmacogenetics.

### **Pathology**

The purpose of this course is to give knowledge about introduction to pathology, definitions, cell injury and the mechanisms, cellular response to injury: degeneration, necrosis, apoptosis, cellular adaptation(hyperplasia, hypertrophy, atrophy and metaplasia, intracellular accumulations and pathologic calcifications) body fluids, edema, dehydration, hyperemia, congestion, hemorrhage, hemostasis and thrombosis, thromboembolism, ischemia and infarct, shock, hypertension, the concept of inflammation, inflammatory cells and elements, chemical mediators of inflammation, pathogenesis of acute inflammation, properties of benign and malign neoplasias, epithelial and nonepithelial tumors, chemical and viral carcinogenesis, roles of oncogenes, tumor suppressor genes, and genes that regulate DNA repair at cancer generation; steps of cancer generation, tumor kinetics and progression; pathogenesis of invasion and metastasis; angiogenesis.

**THE REPUBLIC OF TURKEY  
OKAN UNIVERSITY  
SCHOOL OF MEDICINE  
MEDEDU300 PHASE 3 COURSE CONTENT**

**FALL SEMESTER- COMMITTEE COURSES**

**MED301 NEOPLASIA AND HEMATOPOIETIC SYSTEMS DISEASES COMMITTEE**

***Course Description (must correspond exactly to Catalog description)***

The purpose of this course is to learn the genetic mechanisms and the clinical features of the neoplastic and hematologic system diseases; the pathologic basis of them; the diagnostic tools in radiology and nuclear medicine, and the medical (pharmacological) and surgical treatment modalities for these diseases. They gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

***Learning Objectives***

At the end of this course the student will be able to:

- Understand the normal structures and functions of human body
- Develop clinical problem solving, clinical reasoning and evaluation skills by integrating biomedical, clinical, social and humanities knowledge
- Describe the features of the medications used for the treatment of the neoplastic and the hematologic diseases.
- Learn laboratory techniques in hematology, special diagnostic methods and their interpretation.
- Understand the role and methods of biopsy in hematological and neoplastic diseases.
- Gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

**MED303 MICROORGANISM AND THEIR DISEASES COMMITTEE**

***Course Description (must correspond exactly to Catalog description)***

The purpose of this course is to learn the genetic mechanisms of the infectious diseases in children and adults; the clinical and pathological features of them and the correlation of them with the microorganisms. Each student gains knowledge about the medical (pharmacological) and surgical treatments of these diseases and certain laboratory techniques. This course also describes some infectious diseases with their pathogenesis, clinical characteristics, diagnosis, treatment, prevention. Clinical skills are gained before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

***Learning Objectives***

At the end of this course the student will be able to:

- Define the pathogenesis of infections, approach to the patient, interpret the laboratory results and some clinically important infections.
- Define normal floras of the human body and describe changings of normal flora in pathological conditions.
- Explain parasitologic infestations and regional distribution and spesifications of them; diagnostic inquiry and treatment of parasitic conditions.
- Describe viral infections and preventary measures in viral infections. Treatment of viral conditions.
- Define sterilization and other hygiene methods.
- Explaine effects and side effects of antibiotics and other treatment modalities.
- Gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

## **MED305 CARDIOVASCULAR AND RESPIRATORY SYSTEM DISEASES COMMITTEE**

### ***Course Description (must correspond exactly to Catalog description)***

The purpose of this course is to explain the genetic mechanisms and etiology of the cardiovascular system diseases of the children and adults, besides their clinical and pathological features. Questioning of the patient and examination methods are shown to the students. Students also learn how to use medical and surgical treatments and diagnostic tools. They gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

### ***Learning Objectives***

At the end of this course the student will be able to:

- Explain main cardiac and lung diseases,
- Define examination methods in cardiovascular and respiratory system diseases.
- Describe diagnostic methods in cardiovascular and respiratory system diseases
- Define examination methods and different specifications other than adult population of children in cardiovascular and respiratory diseases.
- Understand and explain the main principles of radiodiagnostics, nuclear medicine and radiation oncology
- Gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

## **MED307 GASTROINTESTINAL SYSTEM DISEASES COMMITTEE**

### ***Course Description (must correspond exactly to Catalog description)***

The purpose of this course is to recognize gastrointestinal system diseases, learn pathogenesis, biochemical pattern and treatment. Students learn to take the story and the examination methods and develop their clinical skills on simulated patients. Diagnostic techniques related with gastrointestinal system diseases and the application of these methods are discussed. Organ transplantation issues, approach to the acute abdomen, malign and vascular diseases of the gastrointestinal disease; life threatening conditions like hepatic coma are discussed. They gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

### ***Learning Objectives***

At the end of this course the student will be able to:

- Know and explain pathogenesis, biochemical pattern and treatment of gastrointestinal system diseases.
- Learn to take the story and the examination methods
- Develop their clinical skills on simulated patients.
- Discuss diagnostic techniques related with gastrointestinal system diseases and the application of these methods.
- Explain to the acute abdomen, malign and vascular diseases of the gastrointestinal disease; life threatening conditions like hepatic coma

## SPRING SEMESTER- COMMITTEE COURSES

### MED302 UROGENITAL AND ENDOCRINE SYSTEM DISEASES COMMITTEE

#### *Course Description (must correspond exactly to Catalog description)*

The purpose of this course is to recognize endocrine and urogenital systems diseases, learn their pathogenesis and treatment. Students learn to take the story and the examination methods and develop their clinical skills on simulated patients. Diagnostic techniques related with endocrine and urogenital systems diseases and the application of these methods are discussed. Genetic screening issues, organ transplantation, approach to the renal insufficiency, malign and vascular diseases of the endocrine and genitourinary systems diseases; life threatening conditions like thyroid storm, miscarriages, complicated pregnancies are discussed. Long term maintenance of the pediatric renal or endocrine patients are discussed. Clinical problem solving in cases with acid-base imbalance are given. The pathological basis of these problems are reviewed in detail. A special emphasis is given to general principle of pathophysiological basis of diseases. Diagnostic modalities and different techniques of imaging methods related with the diseases entities are also learned. They gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

#### *Learning Objectives*

At the end of this course the student will be able to:

- Diagnosis normal and pathological structures of the urogenital system
- Define Hypothalamo-Hypophysial System
- Explain the general characteristics of endocrine system, the mechanisms of hormone action; describe the production, storage, release transport, metabolism and effects of hormones, the clinical features of the excess and deficiency states for hormones
- Describe acute and chronic renal failure and their treatment
- Defines diabetes mellitus, knows the type of DM, diagnosis and treatment
- Gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

### MED304 NEUROSCIENCE AND PSYCHIATRY AND MUSCLE SKELETON SYSTEM DISEASES COMMITTEE

#### *Course Description (must correspond exactly to Catalog description)*

The purpose of this course is to gain the necessary skills and knowledge on the clinical anatomy of the nervous system, skeleton, articulations and bones. Disease mechanisms and histopathological considerations in these systems are discussed in details in pathophysiology and pathology courses. Diagnostic information on cerebrospinal fluid and the neurotransmitter systems in the central nervous system including the functions of neurotransmitters are discussed. Genetic diagnosis of neurological diseases are given. Mental disorders and examination of the psychiatric patient summarized in general. Principles of examination and approach to the patients with musculoskeletal problems and their special treatment methods are summarized also. Special issues of internal medicine related with neurology, orthopedics, physical medicine and the psychiatry are discussed. Approach to the child patient and their special treatment differences are given. They gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

#### *Learning Objectives*

At the end of this course the student will be able to:

- Describe the composition and functions of the nervous system.
- Define mental activities, behavioral aspects of human.
- Describe examination methods in clinical neurology, psychiatry, orthopedics and physical medicine and rehabilitation.
- Define diagnostic modalities in these pathological processes, application of techniques and interpretation of the results.
- Describe special therapeutic interventions in musculoskeletal diseases.
- Define pathophysiological mechanisms of the issues and histopathological findings in diseases.
- Explain effects and side effects of pharmacological agents related with central nervous system, mood altering drugs, pain treatment and anesthetics.
- Gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

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***Course Description (must correspond exactly to Catalog description)***

Information's about the introductory forensic issues are given. General principles of public health, epidemiology and medical ethics are discussed. Information on general knowledge about disease prevention, immunization programmes, sanitary preventions, clear water and purification systems, principles of quarantine and controlling of epidemics, general principles of community health, and biostatistical issues are learned. General pharmacology and environmental toxicology issues are discussed. They gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.

***Learning Objectives***

At the end of this course the student will be able to:

- Describe the primary health care, preventive medicine and also the principles of health education, applications in health care and health insurance and also critically analyze current medical issues and future advances
- Evaluate critically and synthesizing all the medical evidence and perform respecting scientific, professional and ethical values
- Explain general knowledge about disease prevention, immunization programs, sanitary preventions, clear water and purification systems, principles of quarantine and controlling of epidemics, general principles of community health, and biostatistical issues are learned.
- Discuss information on general pharmacology and environmental toxicology issues.
- Gain clinical skills before entering the clinic rotations by performing examinations and procedures with simulated patient in the simulation center.