



**YEDİTEPE UNIVERSITY**

**FACULTY OF MEDICINE**

**PHASE V**

**ACADEMIC PROGRAM**

***2010 - 2011***



	Group1 (7 students)	Group2 (7 students)	Group3 (8 students)	Group4 (8 students)	Group5 (9 students)	Group6 (9 students)	Group7 (9 students)
13-24 September'10 (2 weeks)	PMR Y.Ü.T.F.	NUCLEAR MED + R.ONCOLOGY Y.Ü.T.F.+K.L.K.	DERMATOLOGY Y.Ü.T.F	ANESTHESIOLOGY Y.Ü.T.F.	RADIOLOGY G.E.A.H.	PEDIATRIC SURGERY Y.Ü.T.F.+G.E.A.H.	INFECTIOUS DISEASES H.N.H.
27 September-15October 10 (3 weeks)	ORTHOPAEDICS & TRAUMATOLOGY Y.Ü.T.F.	PSYCHIATRY + CHILD PSYCHIATRY H.N.H.(2)+Y.Ü.T.F(1)	UROLOGY Y.Ü.T.F.	ENT Y.Ü.T.F.	NEUROLOGY Y.Ü.T.F.+G.E.A.H.	NEUROSURGERY Y.Ü.T.F+ K.L.K.	OPHTHALMOLOGY Y.Ü.T.F.
18-28 October'10 (2 weeks)	INFECTIOUS DISEASES H.N.H.	PMR Y.Ü.T.F.	NUCLEAR MED + R.ONCOLOGY Y.Ü.T.F.+ K.L.K.	DERMATOLOGY Y.Ü.T.F	ANESTHESIOLOGY Y.Ü.T.F.	RADIOLOGY G.E.A.H.	PEDIATRIC SURGERY Y.Ü.T.F.+G.E.A.H.
01-19 November'10 (3 weeks)	OPHTHALMOLO GY Y.Ü.T.F.	ORTHOPAEDICS & TRAUMATOLOGY Y.Ü.T.F.	PSYCHIATRY + CHILD PSYCHIATRY H.N.H.(2)+Y.Ü.T.F(1)	UROLOGY Y.Ü.T.F.	ENT Y.Ü.T.F.	NEUROLOGY Y.Ü.T.F.+G.E.A.H.	NEUROSURGERY Y.Ü.T.F+ K.L.K.
22 November-03 December 10 (2 weeks)	PEDIATRIC SURGERY Y.Ü.T.F+G.E.A.H.	INFECTIOUS DISEASES H.N.H.	PMR Y.Ü.T.F.	NUCLEAR MED + R.ONCOLOGY Y.Ü.T.F.+ K.L.K.	DERMATOLOGY Y.Ü.T.F	ANESTHESIOLOGY Y.Ü.T.F.	RADIOLOGY G.E.A.H.
06-24 December 10 (3 weeks)	NEUROSURGERY Y.Ü.T.F+ K.L.K.	OPHTHALMOLOGY Y.Ü.T.F.	ORTHOPAEDICS & TRAUMATOLOGY Y.Ü.T.F.	PSYCHIATRY + CHILD PSYCHIATRY H.N.H.(2)+Y.Ü.T.F(1)	UROLOGY Y.Ü.T.F.	ENT Y.Ü.T.F.	NEUROLOGY Y.Ü.T.F.+G.E.A.H.
27 December'10-07 January11 (2 weeks)	RADIOLOGY G.E.A.H.	PEDIATRIC SURGERY Y.Ü.T.F+G.E.A.H.	INFECTIOUS DISEASES H.N.H.	PMR Y.Ü.T.F.	NUCLEAR MED + R.ONCOLOGY Y.Ü.T.F.+ K.L.K.	DERMATOLOGY Y.Ü.T.F	ANESTHESIOLOGY Y.Ü.T.F.
10-28 January'11 (3 weeks)	NEUROLOGY Y.Ü.T.F.+G.E.A.H.	NEUROSURGERY Y.Ü.T.F+ K.L.K.	OPHTHALMOLOGY Y.Ü.T.F.	ORTHOPAEDICS & TRAUMATOLOGY Y.Ü.T.F.	PSYCHIATRY + CHILD PSYCHIATRY H.N.H.(2)+Y.Ü.T.F(1)	UROLOGY Y.Ü.T.F.	ENT Y.Ü.T.F.
31 January -11 February'11 (2 weeks)	ANESTHESIOLOG Y Y.Ü.T.F.	RADIOLOGY G.E.A.H.	PEDIATRIC SURGERY Y.Ü.T.F+G.E.A.H.	INFECTIOUS DISEASES H.N.H.	PMR Y.Ü.T.F.	NUCLEAR MED + R.ONCOLOGY Y.Ü.T.F.+ K.L.K.	DERMATOLOGY Y.Ü.T.F
14 February -04 March'11 (3 weeks)	ENT Y.Ü.T.F.	NEUROLOGY Y.Ü.T.F.+G.E.A.H.	NEUROSURGERY Y.Ü.T.F+ K.L.K.	OPHTHALMOLOGY Y.Ü.T.F.	ORTHOPAEDICS & TRAUMATOLOGY Y.Ü.T.F.	PSYCHIATRY + CHILD PSYCHIATRY H.N.H.(2)+Y.Ü.T.F(1)	UROLOGY Y.Ü.T.F.
07-18 March 11 (2 weeks)	DERMATOLOGY Y.Ü.T.F	ANESTHESIOLOGY Y.Ü.T.F.	RADIOLOGY G.E.A.H.	PEDIATRIC SURGERY Y.Ü.T.F+G.E.A.H.	INFECTIOUS DISEASES H.N.H.	PMR Y.Ü.T.F.	NUCLEAR MED + R.ONCOLOGY Y.Ü.T.F.+ K.L.K.
21 March -08 April'11 (3 weeks)	UROLOGY Y.Ü.T.F.	ENT Y.Ü.T.F.	NEUROLOGY Y.Ü.T.F.+G.E.A.H.	NEUROSURGERY Y.Ü.T.F+ K.L.K.	OPHTHALMOLOGY Y.Ü.T.F.	ORTHOPAEDICS & TRAUMATOLOGY Y.Ü.T.F.	PSYCHIATRY + CHILD PSYCHIATRY H.N.H.(2)+Y.Ü.T.F(1)
11-22 April'11 (2 weeks)	NUCLEAR MED + R.ONCOLOGY Y.Ü.T.F.+ K.L.K.	DERMATOLOGY Y.Ü.T.F	ANESTHESIOLOGY Y.Ü.T.F.	RADIOLOGY G.E.A.H.	PEDIATRIC SURGERY Y.Ü.T.F+G.E.A.H.	INFECTIOUS DISEASES H.N.H.	PMR Y.Ü.T.F.
25 April -13 May'11 (3 weeks)	PSYCHIATRY + CHILD PSYCHIATRY H.N.H.(2)+Y.Ü.T.F( 1)	UROLOGY Y.Ü.T.F.	ENT Y.Ü.T.F.	NEUROLOGY Y.Ü.T.F.+G.E.A.H.	NEUROSURGERY Y.Ü.T.F+ K.L.K.	OPHTHALMOLOGY Y.Ü.T.F.	ORTHOPAEDICS & TRAUMATOLOGY Y.Ü.T.F.
16-25 May'11 (1,5 weeks)	CL.PHARMACOLOGY Y.U.T.F. (GROUP I)				FORENSIC MEDICINE Y.U.T.F. (GROUP II)		
26 May-03 June'11 (1,5 weeks)	FORENSIC MEDICINE Y.U.T.F. (GROUP I)				CL.PHARMACOLOGY Y.U.T.F. (GROUP II)		



## **PHASE V STUDENT GROUPS**

### **GROUP-1 :GÜLTEN TUNCERLER**

SEDA KUTLUG  
IŞIL AYHAN  
MERVE ERGÜVEN  
ECE DEMİRCİ  
İREM SARI  
TUGCE ALKOÇ

### **GROUP-2:ÇAĞRI BURSALIOĞLU**

CEREN ARKANT  
TOLGA ARKAN  
EMEL ERDAĞI  
YASİR BAŞYİĞİT  
ALİ TARHANA  
EMRE ÇİÇEK

### **GROUP-3:MELTEM BUHUR**

MERVE CANTÜRK  
AYŞE ESEN  
FİGEN OKTAY  
SİNEM ÇETİNKAYA  
ASLI TETİKLİ  
HATİCE HİLAL YÜKSEL  
BÜŞRA İLERİSOY

### **GROUP-4:ÇAĞLA CÖMERTOĞLU**

TOLGA MÜDERRİSOĞLU  
İBRAHİM ÖZBEK  
GÖKHAN ÇE TİN  
GİZEM ÖNER  
ZEYNEP EKMEKÇİOĞLU  
PINAR ATALI  
NESLİHAN KURT

### **GROUP-5:ERAY YURTÇU**

BÜŞRA YILDIRIMLI  
FATMA GÜNEL  
MUHAMMET UMUNÇ  
MUH.KEMAL KAHYALAR  
İSTEMİ ÖZDEMİR  
DAMLAL ALTINTAŞ  
EBRU ÜNÜR  
GÜLER MERDAN

### **GROUP-6:DOĞUKAN CÖMERTER**

YUSUF TAŞCI  
İSMAİL ÖZDEN  
AYÇA SÖZEN  
ELİF ŞENOCAK  
ZARA TAŞ  
HANDE ÖZGE KOÇ  
BERNA ÖZELGÜN  
İLAY KÜBRA YÜCEL

### **GROUP-7:ALP TAŞTAN**

MELEK LİVANALIOĞLU  
CANDAN KENDİR  
SERR A ALÇI  
BEYZA SELİN HAKSEVER  
ASLI KARSLI  
BERÇEM HAZAL GÜRLEYEN  
KÜBRA BAKLACI  
ERDOĞAN KOCAYİĞİT

- Anesthesiology and Reanimation
- Infectious Diseases and Clinic Microbiology
- Dermatology
- Radiology
- Physical Medicine and Rehabilitation
- Nuclear Medicine
- Radiation Oncology
- Psychiatry
- Child Psychiatry
- Ophthalmology
- Otorrhinolaryngology
- Pediatric Surgery
- Neurosurgery
- Orthopaedics and Traumatology
- Neurology
- Urology
- Forensic Medicine
- Clinical Pharmacology



**YEDITEPE UNIVERSITY FACULTY OF MEDICINE**  
**ANESTHESIOLOGY AND REANIMATION (2 weeks)**

**Anesthesiology Lectures: Learning objectives**

**1.1. Introduction to the principles of general anesthesia and postoperative complications**

Students should be able to learn:

Definition and history of of general and regional anesthesia  
Basic principles and theory of general anesthesia  
How general anesthesia is managed

**1.2. Regional anesthesia and local anesthetics**

Students should be able to learn:

Basic principles of regional anesthesia  
Types of regional anesthesia  
Basic regional anesthetic drugs

**1.3. Basic Life Support**

Students should be able to learn:

How to make an appropriate and effective cardiopulmonary resuscitation (CPR).  
Understand the importance of the CPR.  
They will learn to differentiate the reversible causes of cardiac arrest.  
Know how to manage the laboratory process.

**1.4. Advanced Life Support**

Students should be able to learn:

How to manage advanced life support  
Components of advanced life support  
Drug use during CPR  
They will learn to use the tools required during the procedure  
How to manage CPR in simulation

**1.5. Coma / Brain death**

Students should be able to learn:

Definitions of coma and brain death  
How to differentiate between coma and brain death  
Brain death criteria

**1.6. Intoxications**

Students should be able to learn:

Diagnosis of intoxications  
General principles of treatment of intoxications  
Treatment in some common intoxications

**1.7. Anaphylaxis**

Students should be able to learn;

Basics of anaphylactic reactions  
Causes of anaphylaxis  
Emergency treatment of anaphylaxis



## **1.8. Sepsis**

Students should be able to learn;  
Definition of sepsis  
Diagnosis and the criteria of sepsis  
Stages of sepsis  
Treatment of sepsis

## **1.9. Nutrition**

Students should be able to learn;  
Basic principles of nutrition in the ICU  
Types of nutrition  
How to manage nutrition in a critically ill patient

## **1.10. Pain**

Students should be able to learn;  
Definition and the history of pain  
Molecular and neuronal basis of pain  
Approach to a patient with acute and chronic pain  
Medical and interventional treatment of pain

## **1.11. Acute respiratory insufficiency**

Students should be able to learn;  
Definition and diagnosis of acute respiratory insufficiency  
Causes of acute respiratory insufficiency  
Treatment of acute respiratory insufficiency

## **1.12. Acid-base disorders and arterial blood gas evaluation**

Students should be able to learn;  
Basic interpretation of arterial blood gases evaluation  
Diagnose the major acid-base disorders  
How to treat acid-base disorders

## **1.13. Fluid electrolyte balance**

Students should be able to learn;  
The bases of fluid and electrolyte in human body  
Major fluid-electrolyte disorder  
Treatment of major fluid-electrolyte disorders

## **1.14. Oxygen transport and hypoxia treatment**

Students should be able to learn;  
The bases of oxygen transport in the body  
The definition of hypoxia  
The treatment of hypoxia

## **1.15. Thermoregulation (hypo/hyperthermia)**

Students should be able to learn;  
Physiology of thermoregulation  
Thermoregulation under anesthesia  
Disorders of thermoregulation  
Treatment of hypo/hyperthermia

### **1.16. Blood transfusion and complications**

Students should be able to learn;  
Blood products and types of them  
Indications of blood and blood product transfusions  
Complications and treatment of complications of blood transfusions

### **1.17. Anesthesia for the trauma patient**

Students should be able to learn;  
Primary evaluation of the trauma patient  
Fluid resuscitation of the trauma patient  
Anesthesia for the trauma patient

### **1.18. Anesthesia for the head trauma patient (Increased ICP)**

Students should be able to learn;  
Primary evaluation of the head trauma patient  
Emergency treatment of the patient with increased ICP  
Anesthesia for the patient with head trauma

### **1.19. Drowning and near drowning**

Students should be able to learn;  
Physiology and pathology of drowning  
Types of drowning  
Treatment of drowning

## ANESTHESIOLOGY AND REANIMATION

### LECTURES

1.1. Introduction to the principles of general anesthesia and postoperative complications

Özge Köner, MD Assoc. Prof.

1.2. Regional anesthesia and local anesthetics

Sevgi Bilgen, MD Assist.Prof.

1.3. Basic Life Support

Sibel Temür, MD Assoc. Prof.

1.4. Advanced Life Support

Sibel Temür, MD Assoc. Prof.

1.5. Coma / Brain death

Sibel Temür, MD Assoc. Prof.

1.6. Intoxications

Özge Köner, MD Assoc. Prof.

1.7. Anaphylaxis

Ferdi Menda, MD Assist.Prof.

1.8. Sepsis

Sibel Temür, MD Assoc. Prof.

1.9. Intravenous Anesthetics

Özge Köner, MD Assoc. Prof.

1.10. Pain

Ferdi Menda, MD Assist.Prof.

1.11. Acute respiratory insufficiency

Murat Sayın, MD Assoc. Prof.

1.12. Acid-base disorders and arterial blood gas evaluation

Özge Köner, MD Assoc. Prof.

1.13. Fluid electrolyte balance

Özge Köner, MD Assoc. Prof.

1.14. Oxygen transport and hypoxia treatment

Murat Sayın, MD Assoc. Prof.

1.15. Thermoregulation (hypo/hyperthermia)

Hatice Türe, MD Assist.Prof.

1.16. Blood transfusion and complications

Ferdi Menda, MD Assist.Prof.

1.17. Anesthesia for the head trauma patient

Hatice Türe, MD Assist.Prof.

1.18. Drowning and near drowning

Murat Sayın, MD Assoc. Prof.

13-24 September 2010

**ANESTHESIOLOGY AND REANIMATION (2 WEEKS)**

**FIRST WEEK**

<b>TIME</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>08.30-12.30</b>	Practice	Practice	Practice	Practice	Practice
<b>14.00-14.50</b>	Introduction to general anesthesia (Özge Köner)	Regional anesthesia and local anesthetics (Sevgi Bilgen)	Coma / Brain death (Sibel Temür)	Acid-base disorders and arterial blood gas evaluation (Özge Köner)	Basic Life Support (Sibel Temür)
<b>15.00-15.50</b>	Intravenous anesthetics (Özge Köner)	Pain (Ferdı Menda)	Sepsis (Sibel Temür)	Fluid electrolyte balance (Özge Köner)	Advanced Life Support (Sibel Temür)

**SECOND WEEK:**

<b>TIME</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>08.00-12.30</b>	Practice	Practice	Practice	Practice	Practice
<b>14.00-14.50</b>	Acute respiratory insufficiency (Murat Sayın)	Anaphylaxis (Ferdı Menda)	Anesthesia for the head trauma patient (Hatice Türe)	Intoxications (Özge Köner)	EXAM
<b>15.00-15.50</b>	Oxygen transport and hypoxia treatment (Murat Sayın)	Blood transfusion and complications (Ferdı Menda)	Thermoregulation (hypo/hyperthermia) (Hatice Türe)	Drowning and near drowning (Murat Sayın)	



**HAYDARPAŞA NUMUNE TRAINING AND RESEARCH HOSPITAL  
INFECTIOUS DISEASE AND CLINICAL MICROBIOLOGY( 2 WEEKS)**

Paşa Göktaş, MD Assoc. Prof.  
Seyfi Çelik Özyürek, MD  
Emin Karagül, MD  
Nurgül Ceran, MD  
Asuman Şengöz İnan, MD  
Derya Öztürk Engin, MD  
Özgür Dağlı, MD

**LECTURES**

- 1-Laboratory studies in infectious disease
- 2-Specimen selection, collection and processing in infectious disease
- 3-Direct and indirect diagnostic methods in infectious disease
- 4-Culture medium, identification of gram positive and gram negative microorganism's and mechanisms of antimicrobial resistance
- 5-The main stain methods in infectious disease
- 6-Central nervous system infections
- 7-HIV Infection and AIDS
- 8-Gastroenteritidis and food poisoning
- 9-Tuberculosis
- 10-Nosocomial infections
- 11-Infective endocarditis
- 12-Sepsis
- 13-Pneumonia
- 14-Brucellosis
- 15-Salmonellosis
- 16-Empirical antibiotic treatment
- 17-Acute viral hepatitis
- 18-Infections of the upper respiratory tract
- 19-Fever and fever of unknown etiology
- 20-Viral exantems
- 21-Dysinfection, sterilization and antisepsy
- 22-Crimean Congo Hemoragic Fever
- 23- H1N1 Influenza

**AIMS**

1-Laboratory studies in infectious disease

Learning objectives

You should be able to:

- Understanding of the importance of laboratory studies in infectious disease
- Understand how to help diagnosis of infectious disease
- Know how to manage the laboratory process

2-Specimens selection, collection and processing in infectious disease

Learning objectives

You should be able to:

- Know how to select a specimen in varies infectious disease
- Know how to collect the most apporiate specimen for diagnose of infectious disease
- Understand to the most aproprate period to send a specimen in a infectious disease

### 3-Direct and indirect diagnostic methods in infectious disease

#### Learning objectives

You should be able to:

- Know the direct and indirect diagnostic methods of infectious disease
- Know which method are the most specific and the most sensitive for infectious disease
- Know the selection indications of diagnostic methods

### 4-Culture medium, identification of Gram positive and Gram negative microorganisms and the mechanisms of antimicrobial resistance

#### Learning objectives

You should be able to:

- Outline the main variety of culture medium in microbiologic diagnosis
- Know the prominent properties of different culture media
- Understand the basic principles of bacterial identifications
- Know how to manage Gram positive and Gram negative bacterial identification
- Know how to perform an antibiogram
- Understand how to recognize antimicrobial resistance mechanism
- Know the antimicrobial sensitivity test methods

### 5-The main stain methods in infectious disease

#### Learning objectives

You should be able to :

- The use of stain methods in microbiology
- Be prepared to the Gram stain, Acid fast stain and Giemsa stain
- Know the interpret a stained material.

### 6-Central nervous systems infections

#### Learning objectives

You should be able to:

- Classification of central nervous system infections
- Have understand of the pathophysiology of central nervous system infections
- Know what to be etiologic agents of central nervous system infections
- Know the symptoms, signs and diagnosis of central nervous system infections
- Know it's treatment modalities
- Understand it's prognosis and know it's complications
- Be alert to the clinical presentations of acute of central nervous system infections

### 7-HIV and AIDS

#### Learning objectives

You should be able to:

- Understand the basic structures of HIV and influence on cellular fusion
- Know the epidemiology of HIV in Turkey and in the world
- Know diagnostic tests for diagnosis of HIV infections
- Know the clinical features and clinical standing of the varies periods of the infection.
- Know how HIV disease progresses
- Know how correction between HIV and with immunodeficiency
- Know the AIDS and the neoplastic disorders
- Know the main treatment and basic management strategies with HIV patients
- Know the prophylactic procedures related with HIV infections.

## 8-Gastroenteritidis and food poisoning

### Learning objectives

You should be able to :

- Describe and classify of gastroenteritidis and food poisoning.
- Know the epidemiology of gastroenteritidis and know the etiologic agents in varies clinical features.
- Know the pathophysiology of gastroenteritidis
- Know how to diagnose of gastroenteritidis
- understand how to manage gastroenteritidis

## 9-Tuberculosis

### Learning objectives

You should be able to:

- Describe the importance of tuberculosis for Turkey.
  - Know the epidimiology and incidence of tuberculosis in the world and Turkey .
  - Know the diagnostic methods and be able to diagnosis.
  - To classify tuberculosis as pulmoner and extrapulmoner based on affected organ.
  - Know the importance of antimicrobial resistance to M.tuberculosis.
  - Know the antituberculous therapy and it's adwers reactions.
- Discribe the principles of management of tuberculosis.

## 10-Nosocomial infections

### Learning objectives

You should be able to:

- Definition of nosocomial infections.
- Risk factors for nosocomial infections.
- Etiology and pathogenesis of nosocomial infections.
- Diagnosis and treatment for nosocomial infections.
- Strategies for prevention of nosocomial infections.

## 11-Infective endocarditis

### Learning objectives

You should be able to :

- Distinguish between the different forms of infective endocarditis.
- Know the diagnostic and therapeutic approach to infective endocarditis.

Treat of infective endocarditis.

Know the indication for prophylaxis of infective endocarditis.

## 12-Sepsis

### Learning abjectives

You should be able to:

- Know the definition of sepsis
- Etiology and pathophysiology of sepsis.
- Know how to distinguish patients with minor infections from those with life-threatening bacterial or fungal sepsis.
- Diagnose sepsis and septic shock clinically.
- Know the main complications of sepsis.
- Implement the basic management strategies.

## 13-Pneumonia

### Learning objectives

You should know:



- Etiology and pathogenesis of pneumonia
- Diagnose patients as having disease of pneumonia
- Outline the investigation and management

#### 14-Brucellosis

Learning objectives

You should know:

- Clinical features of brucellosis
- Laboratory diagnosis of brucellosis
- Treatment

#### 15-Salmonellosis

Learning objectives

You should know:

- Clinical features of salmonellosis
- Laboratory diagnosis of salmonellosis
- Treatment of salmonellosis

#### 16-Empirical antibiotic treatment

Learning objectives

You should know:

- Classification and side effects of antibiotics
- Clinical using of antibiotics
- Understand the main principles of antibiotic management

#### 17-Acute viral hepatitis

Learning objectives

You should know:

- Classification
- Clinical features (typical,atypical,fulminant)-
- Diagnosis
- Treatment and prophylaxis

#### 18-Infections of the upper respiratory tract

Learning objectives

You should know:

Etiology,epidemiology,clinical manifestations,complications,diagnosis and treatment of

- Acute viral rhinitis (Common cold)
- Acute pharyngitis and tonsillitis
- Otitis media
- Sinusitis
- External otitis

#### 19-Fever and fever of unknown etiology(FUO)

Learning objectives

You should know:

- Definition of fever
- Physiology of fever and associated responses
- Types of fever

- Definitions of unknown etiology
- Causes of FUO
- Approach of the FUO
- Laboratory and diagnosis aids in the FUO evaluation
- Miscellaneous diseases that cause FUOs
- Therapeutic drug trials in patients with FUO

## 20-Viral exantems

Learning objectives

You should know:

- Epidemiology,pathogenesis and pathology,clinical features,complications,diagnosis and management of
- Measles(Rubeola)
- Rubella
- Parvovirus B19 infections and Erytema Infectiosum
- Varicella virus infections
- Human Herpervirus Type 6 and Roseola (Exanthem Subitum)

## 21- Dysinfection, sterilization and antisepsy

You should know

- Descriptions
- Methods
- Differences between procedures

## 22- Crimean Congo Hemoragic Fever

You should know

- Epidemiology
- Microbiological features
- Sign, symptoms
- Diagnosis
- Risk factors, precautions

## 23- H1N1 Influenza

You should know

- Definition for pandemy
- Update information for epidemiology
- Risk factors
- Precautions
- Biological basis of influenza pandemy

**YEDİTEPE UNIVERSITY FACULTY OF MEDICINE**  
**DERMATOLOGY(2 weeks)**

**LESSONS**

1. Basic structure & function of the skin and cutaneous signs

Learning objectives:

- Histology and embryology of the skin
- Functions of the skin
- Skin as an immunologic organ
- Primary and secondary lesions

2. Principles of dermatologic diagnosis:

Learning objectives:

- Patient evaluation: History and physical examination
- Types of skin lesions
- Localization of lesions
- Diagnostic tests
- Biopsy and basic histopathology

3. Contact dermatitis

Learning objectives:

- Basic features of contact dermatitis: Definition, epidemiology and pathophysiology of allergic & irritant contact dermatitis
- Clinical features
- Diagnostic tests: Principles of patch testing
- Differential diagnosis
- Prevention and therapy

4. Urticaria and angioedema

Learning objectives:

- Classification of urticaria: Spontaneous urticaria (acute urticaria, chronic urticaria), physical urticaria, other urticarial diseases
- Pathophysiology of urticaria and angioedema
- Etiology and triggering factors
- Diagnostic approach: The importance of history and physical examination, laboratory tests (which ones and when ?)
- Hereditary angioedema: Clinical features, laboratory tests and treatment
- Differential diagnosis
- Treatment

5. Adverse cutaneous reactions to drugs

Learning objectives:

- Definition and classification of drug-induced cutaneous reactions
- Clinical features
- Clinical and laboratory findings of severe, life-threatening drug-induced cutaneous eruptions
- Diagnostic clues
- Differential diagnosis
- Prognosis and treatment

6. Atopic dermatitis

Learning objectives:

- Definition, epidemiology and pathophysiology of atopic dermatitis
- Clinical features: Childhood, adolescent phase and adulthood
- The role of allergy in atopic dermatitis
- Diagnostic criteria
- The importance of skin tests in atopic dermatitis
- Prognosis and treatment

## 7. Connective tissue diseases

### Learning objectives:

- Rapid review of hereditary connective tissue diseases (Ehlers-Danlos syndrome, cutis laxa, pseudoxanthoma elasticum)
- Lupus erythematosus: Discoid lupus erythematosus, subacute cutaneous lupus erythematosus, systemic lupus erythematosus (clinical features, diagnosis, laboratory tests, differential diagnosis and treatment)
- Dermatomyositis: Clinical features, diagnosis and therapy
- Scleroderma: Localized and generalized types, diagnosis and therapy

## 8. Treatment modalities in dermatology

### Learning objectives:

- The description of indications, contraindications and usual dosages of commonly used topical and systemic therapies (antiinflammatory, antibacterial, antiviral, antifungal, antiprotozoal, immunosuppressive and immunomodulatory agents)
- Phototherapy
- Electrosurgery
- Cryotherapy

## 9. Papulosquamous skin disorders

### Learning objectives:

- The definition, clinical features, differential diagnosis and treatment of psoriasis, lichen planus, pityriasis rosea and seborrheic dermatitis.

## 10. Hair and nail disorders

### Learning objectives:

- Biology of hair growth
- Hair loss (alopecia): - Nonscarring alopecias (alopecia areata, androgenetic alopecia, telogen effluvium, anagen effluvium) – Primary cicatricial alopecias
- Excess hair growth: Hirsutism, hypertrichosis
- Normal nail apparatus
- Abnormal nail apparatus
- Local disorders of nail apparatus
- Nail apparatus involvement in cutaneous diseases
- Neoplasms of the nail apparatus

## 11. Syphilis and other sexually transmitted diseases

### Learning objectives:

- The definition, epidemiology, diagnostic clinical features, laboratory tests and treatment of syphilis, HIV infection, ulcus molle, lymphogranuloma venereum, granuloma inguinale, anogenital warts and genital herpes simplex infection.

## 12. Behçet's syndrome

### Learning objectives:

- The definition, epidemiology, pathophysiology, differential diagnosis and treatment of the oro-oculo-genital syndrome with high prevalence in Turkish people.

### 13. Precancerous skin disorders

#### Learning objectives:

- a. The recognition of the diseases with the possibility of undergoing malignant transformation such as actinic keratoses, Bowen's disease, cutaneous horn, chronic radiation dermatitis, thermal keratoses, chronic cicatrix(scar), keratoses.

### 14. Skin cancers

#### Learning objectives:

- a. Non-melanoma skin cancers: Basal cell carcinoma, squamous cell carcinoma
- b. Cutaneous T-cell lymphoma: Mycosis fungoides
- c. Kaposi's sarcoma
- d. Metastatic cancers of the skin: Carcinoma erysipelatoides, carcinoma en cuirasse, Sister Mary Joseph nodule, mammary paget's disease, extramammary Paget's disease.

### 15. Acne

#### Learning objectives:

- a. The description and treatment of different types of acne such as neonatal and infantile acne, acne vulgaris, nodulo-cytic acne, acne conglobata, acne fulminans and other variants.
- b. The recognition of acneiform eruptions induced by several topical and systemic treatments and gram (-) folliculitis.

### 16. Vitiligo

#### Learning objectives:

- Clinical features of vitiligo.
- Differential diagnosis of vitiligo.
- Diagnosis of vitiligo.
- Treatment of vitiligo.

### 17. Bacterial skin infections

#### Learning objectives:

- Clinical features of bacterial skin diseases.
- Differential diagnosis of bacterial skin diseases.
- Diagnosis of bacterial skin diseases
- Treatment of bacterial skin diseases.

### 18. Viral skin diseases

#### Learning objectives:

- Clinical features of viral skin diseases.
- Differential diagnosis of viral skin diseases.
- Diagnosis of viral skin diseases.
- Treatment of viral skin diseases.

### 19. Parasitic skin diseases

#### Learning objectives:

- Clinical features of parasitic skin infestations.
- Differential diagnosis of parasitic skin infestations.
- Diagnosis of parasitic skin infestations.
- Treatment of parasitic skin infestations.

## 20. Fungal skin diseases

Learning objectives:

- Clinical features of fungal skin diseases.
- Differential diagnosis of fungal skin diseases.
- Diagnosis of fungal skin diseases
- Treatment of fungal skin diseases.

## 21. Chronic autoimmune blistering dermatoses

Learning objectives:

- Clinic features of autoimmune bullous diseases.
- Differential diagnosis of autoimmune bullous diseases.
- Diagnosis of autoimmune bullous diseases
- Treatment of autoimmune bullous diseases.

## 22. Melanocytic naevi and malign melanoma

Learning objectives:

- Clinic features of melanocytic nevi and neoplasms.
- Differential diagnosis of melanocytic nevi and neoplasms.
- Diagnosis of melanocytic nevi and neoplasms.
- Treatment of melanocytic nevi and neoplasms.

## 23. Cutaneous tuberculosis and leprosy

Learning objectives:

- Clinical features of cutaneous tuberculosis.
- Differential diagnosis of cutaneous tuberculosis.
- Diagnosis of cutaneous tuberculosis.
- Treatment of cutaneous tuberculosis.
- Clinical features of leprosy.
- Differential diagnosis of leprosy.
- Diagnosis of leprosy.
- Treatment of leprosy.

# 1. week

	Asuman Cömert Erkılınç, MD Asistant Professor	Özlem Akın, MD Asistant Professor	M. Oktay Taşkapan; MD Professor
Monday	Hospital	Bağdat Polyclinic	Bağdat Polyclinic
		11:00-11:50 Bacterial skin infections (1) 12:00-12:50 Bacterial skin infections (2) 14:30-17:00 Practice	09:00-09:50 Basic Structure & function of the skin and cutaneous signs 10:00-10:50 Principles of dermatologic diagnosis 14:30-17:00 Practice
Tuesday	Bağdat Polyclinic	Hospital	Bağdat Polyclinic
	09:00-09:50 Acne 10:00-10:50 Behçet's syndrome 14:30-17:00 Practice		11:00-11:50 Contact dermatitis (1) 14:30-17:00 Practice
Wednesday	Hospital	Bağdat Polyclinic	Hospital
		09:00-09:50 Viral skin diseases (1) 10:00-10:50 Viral skin diseases (2) 11:00-11:50 Fungal skin diseases (1) 12:00-12:50 Fungal skin diseases (2) 14:30-17:00 Practice	14:30-17:00 Practice
Thursday	Hospital	Bağdat Polyclinic	Bağdat Polyclinic.
		14:00-14:50 Parasitic skin diseases (1) 15:00-15:50 Parasitic skin diseases (2)	16:00-16:50 Urticaria and angioedema 17:00-17:50 Atopic dermatitis
Friday	Bağdat Polyclinic	Hospital	Bağdat Polyclinic
	09:00-09:50 Papulosquamous skin disorders (1) 10:00-10:50 Papulosquamous skin disorders (2) 11:00-11:50 Precancerous skin disorders (1) 15:00-17:00 Practice		12:00-12:50 Connective tissue diseases (1) 15:00-17:00 Practice

# 2. week

Monday	Hospital	Bağdat Polyclinic.	Bağdat Polyclinic.
	14:30-17:00 Practice	09:00-09:50 Chronic autoimmune blistering dermatoses (1) 10:00-10:50 Chronic autoimmune blistering dermatoses (2) 14:30-17:00 Practice	11:00-11:50 Adverse cutaneous reactions to drugs (1)  14:30-17:00 Practice
Tuesday	Bağdat Polyclinic.	Hospital	Bağdat Polyclinic
	09:00-09:50 Treatment modalities in dermatology (1) 10:00-10:50 vitiligo and differential diagnosis 11:00-11:50 Hair and nail disorders (1) 12:00-12:50 Hair and nail disorders (2)  14:30-17:00 Practice	14:30-17:00 Practice	14:30-17:00 Practice
Wednesday	Hospital	Bağdat Polyclinic.	Hospital
	14:30-17:00 Practice	09:00-09:50 Melanocytic naevi and neoplasms (1) 10:00-10:50 Melanocytic naevi and neoplasms (2) 11:00-11:50 Cutaneous tuberculosis and leprosy (1) 12:00-12:50 Cutaneous tuberculosis and leprosy (2)  14:30-17:00 Practice	14:30-17:00 Practice
Thursday	Bağdat Polyclinic	Hospital	Bağdat Polyclinic
	9:00-9:50 Syphilis and other sexually transmitted diseases (1) 10:00-10:50 Syphilis and other sexually transmitted diseases (2) 11:00-11:50 Skin cancers (1)		
Friday	Exam		



**İSTANBUL GÖZTEPE TRAINING AND RESEARCH HOSPITAL**  
**RADIOLOGY (2 weeks)**

İhsan Kuru, MD. ( Clinical Chief )

Alper Hayırlıođlu, MD. ( Clinical Chief )

**LECTURES**

Introduction to radiology

Neuroradiology

Interventional radiology

Musculoskeletal radiology

Throax radiology

Pediatric radiology

Radiology of thorax

Uroradiology

GI tract radiology



## **YEDİTEPE UNIVERSITY FACULTY OF MEDICINE PHYSICAL MEDICINE AND REHABILITATION (2 Weeks)**

### **ACADEMIC FACULTY**

### **DEPARTMENT OF PHYSICAL MEDICINE and REHABILITATION**

Prof. Gülçin GÜLŞEN, M.D., Head of Department

Assist. Prof. Duygu GELER KÜLCÜ, M.D.

### **DURATION OF CLERKSHIP**

Physical Medicine and Rehabilitation Clerkship takes place in the 5th year over a period of 2 weeks in the 5th year

### **GENERAL INFORMATION ABOUT THE DEPARTMENT**

The Department of Physical Medicine and Rehabilitation is located on the 1st floor of the Yeditepe University Hospital. Telephone no: 0126 5784100.

There is also a unit, within the ward, where physical therapy is provided for inpatients.

The outpatient service is below the 1st floor of the polyclinic building. We receive about 50 patients at the outpatient clinics on each day.

### **1. AIM**

Our aim is to supply clerkship students with knowledge and skills in the following topics:

Train the students in Physical Therapy and Rehabilitation methods and teach them to refer their patients to the correct department.

Teach the principles and methods used in evaluating and treating disorders of physical function (Orthopedic and Neurological Dysfunctions).

Train the student in physical disability cases and patient approach in such cases.

Point out the importance of "rehabilitation medicine" which is one of the most important three branches of medicine.

Teach the students how to acquire skills and knowledge about rheumatological diseases and patient rehabilitation.

Teach the students how to take a history, to perform the physical and motor system examination of patients who are referred to the Physical Medicine and Therapy Department (Rheumatologic and other disabilities).

Teach students how to formulate a diagnosis and which laboratory and other tests to ask for in order to analyze and apply the results such as neurophysiological tests, gait assessment.

Teach students the principles of maintaining a good patient doctor relationship.

### **2. LEARNING OBJECTIVES**

#### **2. 1. KNOWLEDGE OBJECTIVES**

#### **Diseases / Clinical Conditions Expected**

#### **Performance**

1. Low Back Pain
2. Shoulder Pain
3. Osteoarthritis
4. Cauda Equina Syndrome
5. Fibromyalgia
6. Lumbar discs herniation
7. Connective Tissue Diseases
8. Crystal arthropathies
9. Ligament lesions, Achilles tendon
10. Rheumatoid arthritis
11. Septic arthritis
12. Spondyloarthropathies
13. Tenosynovitis
14. Stroke
15. Ischemic attacks (treatable)
16. Chronic fatigue syndrome
17. Motor neuron diseases
18. Myopathies
19. Multiple sclerosis
20. Cerebral palsy
21. Paraplegia- acute transverse myelitis

22. Parkinson's disease
23. Psychogenic pain (chronic)
24. Psychosomatic dysfunctions (functional syndromes)
25. Movement disorders
26. Peripheral neuropathy
27. Polyneuropathies
28. Neural tube defects
29. Spinal muscular atrophy
30. Guillain –Barre Syndrome

## 2.2. CLINICAL SKILLS OBJECTIVES

A. Skills which the students must learn and or acquire, and tests which the student must be able to assess.

- a. Take the history of a patient
- b. Set up a file for a patient
- c. Write a prescription (correctly and clearly)
- d. Make specific neurological examinations (Examination of the reflexes, examination for neuropathy, examination of the senses, examination of the cranial nerves, aphasia examination, examination by Romberg test, cerebellar examination, gait and extrapyramidal system examination)
- e. Musculo-skeletal system examination (general rheumatologic examination , evaluation of joint pain , oedema , inflammation, arthritis of the joints, motor dysfunction, and loss of physical function , gait assessment muscle tests , joint range of motion, examination of feet )
- f. Drug administration (eg give a subcutaneous injection)
- g. Transportation of patients with spinal injuries, and the principles of caring for a patient in the acute stages.

### **Intellectual Skills**

- a. Take a history relevant to the case and be able to ask rational questions .
- b. Determine the relative urgency of a case .
- c. Interpret the pulse rate
- d. Evaluate sense and motor reflexes
- e. Make a differential diagnosis.
- f. Train the student to be able to choose relevant laboratory tests, and other diagnostic methods.
- g. Assess validity of treatment
- h. Assess response to medication
- i. Follow up the patients response to medication
- j. Adjust the medication dose for patients with liver and kidney disorders
- k. Prescribe the correct radiodiagnostic test
- l. Recognize which areas of the body are in an X-ray and why the X-ray has been taken
- m. Evaluate X-ray
- n. Provide primary health care services.

### **Communication Skills**

- a. Maintain a good relationship with colleagues and auxiliary health personnel.
- b. Maintain a good relationship with the patient and his / her relatives.
- c. Give the patient and his / her relatives' correct and adequate information about the disease.
- d. Give the patient correct information about the disease and its treatment in a clear way.
- e. Inform a diabetic patient about the importance of foot care.
- f. General approach to the patient with cancer. Inform him / her about the effects of immobilization.

B. Skills which the students must acquire, be able to perform in requisite conditions.

- a. Main principles of caring for patients with spinal injury, stroke, cerebral palsy, spina bifida, etc.
- b. Care and treatment of wounds
- c. Physical examination
- d. Evaluation of joint stability
- e. Assessment of patient's bone mineral density
- f. Assessment of bone scintigraphy
- g. Assessment of brain tomography

- h. Assessment of cranial MR.
- i. Scoring the rheumatological test results (RF, ANA, double-stranded DNA, ANCA, ASO, HLA-B27, etc)
- j. Assessment of cervical, lumbar, AC and direct abdomen and peripheric joint graphies.
- k. Philosophy of “*Rehabilitation*” and continuation of rehabilitation during life-time
- l. Approach to disabled patient
- m. Consider the patient as a whole within his own environment.
- C. Interventions students must observe and become familiar with throughout their studies:
  - a. Aspiration of joint fluid
  - b. Electromyography and evoked potential testing.
  - c. Evaluation of muscle strength
  - d. Rehabilitation activities, use of physical therapy devices
  - e. Special P.M.R exercises
  - f. Pediatric rehabilitation

### 3. GENERAL INFORMATION ABOUT THE CLERKSHIP

The first day of the Clerkship is Orientation Day. Students are given general information concerning Physical Medicine and the teaching programme. Materials are distributed, the students are assigned specific duties and told what these will involve they are also given their first bedside training. They are divided into 2 groups. They have theoretical and practical bedside training. They work at the outpatient clinic and on the ward. They participate in educational activities (seminars, case discussions, journal club) once in a week , at the Department.

#### Educational Techniques

Theoretical classes, bedside training, seminars , practical classes, journal club hours, conferences.

#### 3.1. WHAT WE EXPECT FROM THE STUDENTS

Students are expected to actively participate in the program. Throughout the clerkship the students must take part in hospital rounds, and clinical interventions at the polyclinic and private polyclinics. They must observe and become familiar with the interventions of the department. They must also participate in seminars.

### 4. ASSESSMENT

At the end of the Clerkship students are given a written examination. The exam consists of multiple choice questions a short essay, a modified essay, and long essay guest ions. The students are also assessed according to their performance during the clerkship. The passing grade is fifty out of 100.

### 5. REFERENCES FOR FURTHER STUDY

- Beyazova M, Gökçe-Kutsal Y. Fiziksel Tıp ve Rehabilitasyon, Güneş Kitabevi, Ankara, 2000.
- David J. Megee. Orthopedic Physical Assessment. W.B. Saunders Co., Philadelphia, 1997.
- Hoppenfeld. Physical Examination of the spine and extremities. Appleton & Lange, Philadelphia, 1976.
- Joel A. DeLisa, Bruce M. Gans. Rehabilitation Medicine. Lippincott-Raven, Philadelphia, 1998.
- Randall L. Braddom. Physical Medicine and Rehabilitation. W.B. Saunders Company, Philadelphia, 2001.
- Hochberg MC, Silman AJ, Smolen JS, Weinblatt ME, Weisman MH (Ed.). Rheumatology. Third Edition, Mosby, Edinburgh, 2003.

Learning objectives:

1. Musculoskeletal (locomotor) system symptom and signs
  - Be able to take a history relevant to the case and be able to ask rational guest ions
  - Determine the relative urgency of a case
  - Be able to recognize the possible underlying pathology and to refer your patients to the correct department.
2. Musculoskeletal (locomotor) system examination
  - Be able to do general rheumatologic examination , evaluation of joint pain, edema , inflammation, arthritis of the joints, motor dysfunction, and loss of physical function , gait assessment muscle tests , joint range of motion, examination of feet ).
3. Enflammatory joint diseases
  - Understand the etiopathogenesis
  - Be able to distinguish between the different forms of inflammatory joint diseases and the diagnostic and therapeuturic approach to each.
  - Prescribe the correct radiodiagnostic test which laboratory and other tests to ask for in order to diagnose
  - Write a treatment prescription (correctly and clearly)
4. Diagnosis and treatment of servical and upper extremity pain
  - Remember the anatomy of cervical spine, shoulder, elbow and wrist joints

- Learn how to differentiate the origin of the pain
- Prescribe the correct radiodiagnostic test which laboratory and other tests to ask for in order to diagnose
- Formulate a differential diagnosis
- Write a treatment prescription (correctly and clearly)

#### 5. Seronegative spondyloarthropathies

- Understand the etiopathogenesis
- Describe diagnostic criteria
- Learn how to formulate a differential diagnosis in between.
- Be able to choose relevant laboratory tests, and other diagnostic methods.
- Scoring the rheumatological test results (RF, ANA, double-stranded DNA, ANCA, ASO, HLA-B27, etc)
- Write a treatment prescription (correctly and clearly)

#### 6. Degenerative Arthritis

- Understand the etiopathogenesis
- Learn how to formulate a differential diagnosis from inflammatory joint disease
- Assessment of cervical, lumbar, peripheral jointographies.
- Learn treatment choices (drug use, rehabilitation activities or use of physical therapy devices)

#### 7. Osteoporosis and metabolic bone diseases

- Understand the etiopathogenesis
- Assessment of jointographies and laboratory
- Learn how to formulate a differential diagnosis Learn the risk factors for osteoporosis
- Prevention from osteoporosis
- Assessment of bone mineral densitometry
- Decision of appropriate medication for an individual patient
- Exercise prescription of an osteoporotic patient

#### 8. Differential diagnosis and treatment of lowback and lower extremity pain

- Remember the anatomy of lumbar spine, hip and knee joints
- Learn how to differentiate the nature of the pain
- Formulate a differential diagnosis
- Prescribe the correct radiodiagnostic test which laboratory and other tests to ask for in order to diagnose
- Write a treatment prescription (correctly and clearly)

#### 9. Pain pathophysiology classification and treatment

- Learn pain pathways
- Learn types of pain (thalamic pain, neuropathic pain, radicular pain, referring pain, inflammatory pain)
- Evaluation of pain
- Treatment of different types of pain either medication or physical therapy

#### 10. Therapeutic exercises and quality of life

- Learn kinds of exercises (ROM exercises, muscle strengthening )isometric, isotonic, isokinetic) exercises, strengthening exercises, aerobic exercises, etc)
- Learn benefits of different type of exercises
- Learn how to prescribe exercise for an individual according to his diagnosis and physical examination
- Approach to disabled patient
- Consider the patient as a whole within his own environment.
- Philosophy of "Rehabilitation" and continuation of rehabilitation during life-time
- Learn how to evaluate patient's quality of life

#### 11. Rehabilitation of neurologic diseases

- The etiology and classification of the neurologic diseases
- Evaluation of muscle strength, spasticity, examination of the reflexes, examination for neuropathy, examination of the senses, examination of the cranial nerves, aphasia examination, examination by Romberg test, cerebellar examination, gait and extrapyramidal system examination)
- Make decision of the patient's disability level.
- Decision of short-term and long-term goals for an individual
- Learn how to follow up progress of the patient
- Learn possible complications of a patient with neurologic diseases and how to prevent and how to treat them.

#### 12. Radiologic evaluation of musculoskeletal disorders

- Learn how to evaluate radiography of spine and joints (Evaluation of osteoarthritis, Evaluation of spondilosis, spondilolisthesis, spondilolysis, scoliosis, evaluation of typical rheumatologic findings of spine and joints in Rheumatoid Arthritis, ankylosing spondylitis and other spondilarthropathies)
- Evaluation of lomber and cervical disc hernies and spinal stenosis by MRI

#### 13. Periferic nerve diseases

- Symptomes and signs of peripheric nerve injuries and polyneuropathises
- Rehabilitation principles for peripheric nerve injury
- Treatment approaches

#### 14. Diseases of spine and spinal cord

- Remember the anatomy of spine and spinal cord
- Diagnosing spondilosis, spondilolisthesis, spondilolysis and scoliosis according to symptoms, signs and diagnostic tests
- Learn possible treatment choices
- Assessment of a patient with spinal cord injury
- Make decision of the patient's disability level.
- Decision of short-term and long-term goals for an individual
- Learn how to follow up progress of the patient
- Learn possible complications of a patient with neurologic diseases and how to prevent and how to treat them.

#### 15. Drug use in musculoskeletal system disorders

- Learn how to prescribe nonsteroid antiinflammatory drugs
- Dosage, endication and contraendications and side effects of NSAIDs
- Steroid use (endication, kontraendication, prescription, side effects)
- Disease modifying drugs (DMARDS) (endication, kontraendication, prescription, side effects)

#### 16. Physical medicine agents and orthosis and prothetics in rehabilitation

- Learn the benefits of physical medicine agents
- Learn how to decide which physical agent for which patient
- Endications and contraendications of physical agents
- Kinds of orthosis and prothetics
- The principles of using orthosis and prothetics
- Learn how to prescribe which orthosis to which patient

FIRST WEEK

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09:00-10:45	Musculoskeletal (locomotor)system symptom and signs Doç.Dr. D. G. Külcü	Seronegative spondyloarthropathies Doç.Dr E. Aydoğ	Differential diagnosis and treatment of lowback and lower extremity pain Doç.Dr E. Aydoğ	Diagnosis and treatment of servical and upper extremity pain Doç.Dr D. G. Külcü	Seminar Rehabilitation of Neurologic Diseases Doç.Dr D. G. Külcü
11:00-12:15	Musculoskeletal (locomotor) system examination Doç.Dr D. G. Külcü	Degenerative Arthritis Doç.Dr E. Aydoğ	Physical medicine agents And ortosis and prothetics in rehabilitation Doç.Dr E. Aydoğ	Radiologic evaluation of musculoskeletal disorders Doç.Dr D. G. Külcü	Diseases of spine and spinal cord Doç.Dr D. G. Külcü
13:30-16:30	Clinical practice	Clinical practice	Clinical practice	Clinical practice	Clinical practice

SECOND WEEK

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09:00-10:45	Pain pathophysiology Classification and treatment Doç.Dr D. G. Külcü	Osteoporosis and metabolic bone diseases Doç.Dr E. Aydoğ	Periferic nerve diseases Doç.Dr E. Aydoğ	Clinical practice	Exam
11:00-12:15	Therapeutic exercises Doç.Dr D. G. Külcü	Drug use in musculoskeletal system disorders Doç.Dr E. Aydoğ	Enflammatory joint diseases Doç.Dr E. Aydoğ		
13:30-16:30	Clinical practice	Clinical practice	Clinical practice	Clinical practice	



**YEDİTEPE UNIVERSITY FACULTY OF MEDICINE**  
**NUCLEAR MEDICINE (1 week)**

Ayşe Mavi,MD,Assoc. Prof.

Nalan Alan Selcuk,MD, Assist. Prof.

Türkey Toklu, M.Sc.

1. Basic radiation physics and radiation detectors used in Nuclear Medicine
2. Introduction to Nuclear Medicine
3. Radiation safety and effects of radiation
4. Thyroid and parathyroid scintigraphy
5. Nuclear medicine in hyperparathyroidism
6. Nuclear medicine in thyroid carcinoma
7. Bone scintigraphy
8. Infection imaging
9. Dynamic and static renal scan
10. Brain scintigraphy
11. Myocardial perfusion scan
12. Captoprail renography, transplant scan
13. Lung perfusion and ventilation scan (V/Q scan)
14. Hepatobiliary scan
15. GIS bleeding scan
16. FDG PET in oncology, cardiology and neurology
17. Radionuclide Therapy

1. Basic radiation physics and radiation detectors used in Nuclear Medicine

Learning objectives:

What is radiation? What is the type of radiation that we use in Nuclear Medicine?

2. Introduction to Nuclear Medicine

Learning objectives:

What is Nuclear Medicine and how we can obtain images?

3. Radiation safety and effects of radiation

Learning objectives:

Biological effects of radiation and how to work with radiation

4. Thyroid and parathyroid scintigraphy

Learning objectives:

Indications of thyroid and parathyroid scintigraphy

5. Nuclear medicine in hyperparathyroidism

Learning objectives:

Indications of parathyroid scintigraphy

6. Nuclear medicine in thyroid carcinoma

Learning objectives:

Treatment of well differentiated thyroid cancer.

7. Bone scintigraphy

Learning objectives:

Indications of bone scintigraphy

8. Infection imaging

Learning objectives:

Indications of Tc99m HMPAO leukocyte and Indium 111 leukocyte scintigraphies

9. Dynamic and static renal scan

Learning objectives:

Indications of renal scintigraphy. Obstructive, infectious pathologies,

10. Brain scintigraphy

Learning objectives:

Indications of brain scintigraphy

11. Myocardial perfusion scan

Learning objectives:

Indications of myocard scintigraphy.

12. Captoprail renography, transplant scan

Learning objectives:

Applications of renal scintigraphy in renovascular hypertension and trasplante kidney

13. Lung perfusion and ventilation scan (V/Q scan)

Learning objectives:

This is an emergency in Nuclear Medicine. Pulmonary embolism can be shown by V/Q scan.

14. Hepatobiliary scan

Learning objectives:

Indications of hepatobiliary scintigraphy. It helps differentiating biliary atrezia from neonatal hepatitis by showing the pathway of bile. We can detect the function of liver

15. Gastrointestinal bleeding scan (GIS bleeding scan)

Learning objectives:

It is an emergency. By GIS bleeding scan, we can show the origin of the bleeding

16. FDG PET in oncology, cardiology and neurology

Learning objectives:

Indications of FDG-PET/CT in oncology (staging, restaging of cancer), in neurology (demans, epilepsy, brain tumor) and in cardiology (viability)

17. Radionuclide Therapy

Learning objectives:

Indications of radionuclide therapy in cancer, bone pain pallation, radiosynovectomy.

## **NUCLEAR MEDICINE (FIRST WEEK) EDUCATIONAL PROGRAM**

### **1.Day**

#### **TIME**

09.00-10.30  
10.45-11.30  
11.30-12.00  
13.00-13.30

#### **SUBJECT**

Basic radiation physics and radiation detectors used in Nuclear Medicine  
Practice: Radiation detectors, hotlab  
Introduction to Nuclear Medicine  
Practice: Radiopharmaceuticals, Gamma Camera, PET/CT, Thyroid Uptake System  
  
Radiation safety and effects of radiation  
Brain Imaging and neurologic PET Application  
Bone scintigraphy and other tumor agents

### **2.Day**

09.00-10.00  
10.15-10.45  
11.00-11.30  
11.30-12.00  
13.00-13.45  
14.00-14.45  
15.00-16.30

Thyroid and parathyroid Scintigraphy  
Nuclear Medicine in Hyperthyroidism  
Nuclear Medicine in Thyroid Cancer  
Practice: Thyroid  
FDG-PET in lung cancer  
FDG-PET in breast cancer  
Practice: PET imaging

### **3.Day**

09.00-10.00  
10.15-11.00  
11.15-12.00  
13.00-14.00  
14.15-15.30  
15.40-16.30

Myocardial perfusion scan (MPS): Indications, techniques  
Practice: MPS  
Cardiologic PET Application  
Lung perfusion and ventilation scintigraphy (V/Q scan)  
Hepatobiliary scan and GIS Bleeding Scan  
Practice: Lung and GIS system imaging

### **4.Day**

09.00-09.45  
10.00-10.45  
11.00-12.00  
13.00-13.45  
14.00-14.45  
15.00-16.30

Dynamic and static renal scintigraphy  
Captopril Renography and Transplant Scan  
Practice: Renal scintigraphy  
Radionuclide Therapy  
FDG-PET in lymphoma  
Practice: Radionuclide therapy

### **5.Day**

09.00-09.45  
10.00-10.45  
11.00-12.00  
13.00-13.45  
14.00-14.45  
15.00-16.00  
16.00-17.00

Infection Imaging part 1: FDG-PET,  
Infection Imaging part 2: Leucocyte and Gallium 67 Scintigraphies  
Practice : infection imaging  
FDG-PET in Head and Neck Cancer  
FDG-PET in GIS and gynecologic cancers  
Practice: PET imaging  
EXAM

**MD LÜTFİ KIRDAR KARTAL TRAINING AND RESEARCH HOSPITAL**  
**RADIATION ONCOLOGY(1 Week)**

Alpaslan Mayadađlı , MD. (Chief)  
Cengiz Gemici, MD. (Course Coordinator )  
Sevgi Özden, MD.  
Mihriban Koçak, MD.  
Makbule Eren, MD.  
Hazan Özyurt, MD.  
Atınc Aksu, MD.  
Naciye Özşeker, MD.  
Saliha Peksu, MD.

1. Introduction to Radiation Oncology
2. Basic terminology
3. Physics and biology of therapeutic radiation
4. Radiation treatment planning
5. Types of therapeutic radiation
6. Cancer types and role of radiotherapy in cancer management
7. Combined treatment with chemotherapy and radiation and its importance in organ preservation
8. Role of radiotherapy in cancer palliation and pain
9. Role of radiotherapy in benign diseases
10. New technology and its role in cancer management

<b>IME</b>	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
09:40 10:30	Introduction and Radiation Oncology Terminology <b>CENGİZ GEMİCİ,MD</b>	Types of Radiotherapy  <b>ATINÇ AKSU,MD</b>	Breast Cancer  <b>HAZAN ÖZYURT,MD</b>	Lymphomas  <b>HAZAN ÖZYURT,MD</b>	RT of Benign Diseases <b>SEVGİ ÖZDEN,MD</b>
10:40 11:30	Basics of Radiation Physics <b>ATINÇ AKSU,MD</b>	External beam radiation and brachytherapy  <b>HAZAN ÖZYURT,MD</b>	Lung Cancer  Mihriban Koçak, MD	Gynecologic Cancers  Makbule Eren, MD.	Skin Cancer  <b>ATINÇ AKSU,MD</b>
11:40 12:30	Basics of Radiation Biology <b>CENGİZ GEMİCİ ,MD</b>	3-D Conformal RT,Intensity Modulated RT,Sterotaxic Radiosurgery <b>SEVGİ ÖZDEN ,MD</b>	Gastrointestinal Cancers  <b>CENGİZ GEMİCİ ,MD</b>	Urinary System Cancers  <b>NACİYE ÖZŞEKER,MD</b>	Student Presentations  <b>CENGİZ GEMİCİ ,MD</b>
13:40 14:30	Treatment Plannig and Aim of Simulation <b>ATINÇ AKSU ,MD</b>	Cancer Management, Cancer Treatment Options <b>SEVGİ ÖZDEN ,MD</b>	Head and Neck Cancers <b>SALİHA PEKSU ,MD</b>	Pediatric Cancers  <b>HAZAN ÖZYURT,MD</b>	Student Presentations <b>CENGİZ GEMİCİ,MD</b>
14:40 15:30	Treatment Set-up,Simulation Procedure <b>ALPASLAN MAYADAĞLI ,MD</b>	Radioprotection, Radiosensitization <b>CENGİZ GEMİCİ,MD</b>	Brain Tumors  <b>NACİYE ÖZŞEKER,MD</b>	Palliative Radiotherapy  <b>NACİYE ÖZŞEKER ,MD</b>	Quiz  <b>CENGİZ GEMİCİ,MD</b>
15:40 16:30	Radiation Techniques  <b>ATINÇ AKSU,MD</b>	Clinical Practice 1.  <b>HAZAN ÖZYURT,MD</b>	Clinical Practice 2.  <b>NACİYE ÖZŞEKER,MD</b>	Clinical Practice 3.  <b>SEVGİ ÖZDEN ,MD</b>	Discussion  <b>ALPASLAN MAYADAĞLI,MD</b>

**HAYDARPAŞA NUMUNE TRAINING AND RESEARCH HOSPITAL  
PSYCHIATRY (2 weeks)**

**EDUCATION SCHEDULE AND AIMS**

1. Introduction to psychiatry and history of psychiatry
2. Psychiatric ethics and patient-physician relations
3. Psychiatric interview and mental status examination
4. Signs and symptoms in psychiatry
5. Diagnosis and classification of psychiatric disorders
6. Mental disorders due to a general medical condition
7. Schizophrenia and other psychotic disorders
8. Alcohol related disorders
9. Substance abuse and related disorders
10. Mood disorders
11. Anxiety disorders
12. Psychiatric emergencies
13. Somatoform disorders, factitious disorders and simulation
14. Eating and sleep disorders
15. Somatic therapies
16. Dissociative disorders
17. Sexual dysfunctions, paraphilias and gender identity disorders
18. Impulse-control and adjustment disorders
19. Psychopharmacology
20. Forensic psychiatry
21. Consultation-Liaison psychiatry and geriatric psychiatry
22. Psychotherapies
23. Child and adolescent psychiatry
24. Personality disorders

**1. Introduction to psychiatry and history of psychiatry**

Educational aims:

- a. The importance of psychiatry in general health practice
- b. Overviewing psychiatric health and treatment procedures from old times to present

**2. Psychiatric ethics and patient-physician relations**

Educational aims:

- a. Overview of ethical issues and problems in psychiatric ethics
- b. Important points to be taken into consideration for patient-physician relationship to be strong and effective

**3. Psychiatric interview and mental status examination**

Educational aims:

- a. Psychiatric interview, history and mental status examination

#### **4. Signs and symptoms in psychiatry**

Educational aims:

- a. Evaluation of psychiatric symptomatology and signs and symptoms of psychiatric disorders

#### **5. Diagnosis and classification of psychiatric disorders**

Educational aims:

- a. Evaluation of frequently used diagnostic measures in psychiatry
- b. Classification of disorders using these diagnostic measures

#### **6. Mental disorders due to a general medical condition**

Educational aims:

- a. Etiology, diagnosis, symptoms and treatment of mental disorders due to general medical condition like delirium, dementia and amnesic syndromes

#### **7. Schizophrenia and other psychotic disorders**

Educational aims:

- a. Etiology, diagnosis, symptoms and treatment of psychotic disorders like schizophrenia, schizoaffective disorder and delusional disorder

#### **8. Alcohol related disorders**

Educational aims:

- a. Overview of alcohol addiction, abuse and alcohol related other disorders

#### **9. Substance abuse and related disorders**

Educational aims:

- a. Overview of frequently seen addictive substances
- b. Psychiatric disorders seen related to these substances

#### **10. Mood disorders**

Educational aims:

- a. Etiology, diagnosis, symptoms and treatment of mood disorders (both in depressive and bipolar mood disorders)

## **11. Anxiety disorders**

Educational aims:

- a. Etiology, diagnosis, symptoms and treatment of panic disorder, generalized anxiety disorder, social phobia and post-traumatic disorders which are the most frequently seen anxiety disorders

## **12. Psychiatric emergencies**

Educational aims:

- a. Differential diagnosis and treatment of psychiatric emergencies

## **13. Somatoform disorders, factitious disorders and simulation**

Educational aims:

- a. Differential diagnosis and treatment of somatoform disorders, factitious disorders and simulation

## **14. Eating and sleep disorders**

Educational aims:

- a. Etiology, diagnosis, symptoms and treatment of eating disorders like anorexia nervosa and bulimia nervosa and sleep disorders like parasomnias and dysomnias

## **15. Somatic therapies**

Educational aims:

- a. Overview of somatic therapies especially electro-convulsive therapy (ECT)

## **16. Dissociative disorders**

Educational aims:

- a. Etiology, diagnosis, symptoms and treatment of dissociative disorders like dissociative amnesia, fugue and dissociative identity disorder

## **17. Sexual dysfunctions, paraphilias and gender identity disorders**

Educational aims:

- a. Differential diagnosis and treatment of sexual dysfunctions like vaginismus, premature ejaculation, erectile dysfunction; paraphilias and gender identity disorders



## **18. Impulse-control and adjustment disorders**

Educational aims:

- a. Etiology, diagnosis, symptoms and treatment of impulse control disorders like intermittent explosive disorder, trichotillomania, kleptomania and adjustment disorders

## **19. Psychopharmacology**

Educational aims:

- a. Overview of anti-psychotic, anti-depressant, anxiolytic and mood-stabilizing agents used in psychiatric treatment

## **20. Forensic psychiatry**

Educational aims:

- a. Overview of important issues on the criminal code and civil code concerning psychiatry

## **21. Consultation-Liaison psychiatry and geriatric psychiatry**

Educational aims:

- a. Important issues on consultation psychiatry in general hospitals and differential diagnosis and treatment of these diseases
- b. Overview of psychiatric disorders of the elderly and clinical approach to the elderly patients

## **22. Psychotherapies**

Educational aims:

- a. The evaluation of the psychotherapies in history and overview of therapy techniques

## **23. Child and adolescent psychiatry**

Educational aims:

- a. Overview of frequently seen disorders in child and adolescent psychiatry

## **24. Personality disorders**

Educational aims:

- a. Clinical evaluation and differential diagnosis of personality disorders



**I. WEEK**

	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
<b>08:40 – 09:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>09:40 – 10:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>10:40 – 11:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>11:30 – 12:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>13:40 – 14:30</b>	Introduction to psychiatry and history of psychiatry Dr. Mecit ÇALIŞKAN	Signs and symptoms in psychiatry Dr. Cem CERİT	Schizophrenia and other psychotic disorders I Dr. Cem CERİT	Substance abuse and related disorders Dr. Gonca ERKIRAN	Anxiety disorders I Dr. Figen ATALAY
<b>14:40 – 15:30</b>	Psychiatric ethics and patient-physician relations Dr. Mecit ÇALIŞKAN	Diagnosis and classification of psychiatric disorders Dr. Cem CERİT	Schizophrenia and other psychotic disorders II Dr. Cem CERİT	Mood disorders I Dr. Melike NEBİOĞLU	Anxiety disorders II Dr. Figen ATALAY
<b>15:40 – 16:30</b>	Psychiatric interview and mental status examination Dr. Melike NEBİOĞLU	Mental disorders due to a general medical condition Dr. Melike NEBİOĞLU	Alcohol related disorders Dr. Gonca ERKIRAN	Mood disorders II Dr. Melike NEBİOĞLU	Psychiatric emergencies Dr. Gonca ERKIRAN
<b>16:30 – 17:30</b>					

**II. WEEK**

	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
<b>08:40 – 09:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>09:40 – 10:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>10:40 – 11:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>11:30 – 12:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>13:40 – 14:30</b>	Somatoform disorders, factitious disorders and simulation Dr. Melike NEBİOĞLU	Dissociative disorders Dr. Cem CERİT	Psychopharmacology Dr. Melike NEBİOĞLU	Psychoterapies Dr. Melike NEBİOĞLU	PRACTICE
<b>14:40 – 15:30</b>	Eating and sleep disorders Dr. Melike NEBİOĞLU	Sexual disfunctions, paraphilias and gender identity disorders Dr. Cem CERİT	Forensic psychiatry Dr. Mehmet ÜÇİŞİK	Child and adolescent psychiatry Dr. Figen ATALAY	PRACTICE
<b>15:40 – 16:30</b>	Somatic therapies Dr. Gonca ERKİRAN	Impulse-control and adjustment disorders Dr. Figen ATALAY	Consultation-Liaison psychiatry and geriatric psychiatry Dr. A. Mehmet ÜÇİŞİK	PRACTICE	PRACTICE
<b>16:30 – 17:30</b>					

**YEDİTEPE UNIVERSITY FACULTY OF MEDICINE**  
**CHILD AND ADOLESCENT PSYCHIATRY(1 week)**

Emine Zinnur Kılıç, MD.  
Oğuzhan Zahmacıoğlu , MD.

**EDUCATION SCHEDULE AND AIMS**

1. Introduction to child and adolescent psychiatry
2. Psychiatric assessment of the child
3. Understanding normal and deviant mental development
4. Risk and protective factors in child mental development
5. Assessing families
6. Child abuse and neglect
7. Normal development in adolescence
8. Common adolescent problems and relations with family
9. Pervasive developmental disorders
10. Mental retardation
11. Attention deficit hyperactivity disorder and conduct disorder.
12. Tics and Tourette's disorder
13. Enuresis and encopresis
14. Separation anxiety disorder and other childhood anxiety disorders.
15. Mood disorders in childhood and adolescence
16. Psychiatric treatments of child and adolescent mental disorders:
  - a) Psychotherapies
  - b) Pharmacologic treatments

**1. Introduction to child and adolescent psychiatry**

- a) Learning about the issues of child and adolescent psychiatry
- b) Understanding the importance of child and adolescent psychiatry as a preventive discipline for promoting community mental health.
- c) Learning about common childhood psychiatric problems.

**2. Psychiatric assessment of the child**

AIMS:

- a) The importance forming a relationship with the child and family
- b) History taking from the child and family
- c) Learning about commonly used tests in assessing children

**3. Understanding normal and deviant mental development**

AIMS:

- a) Learning about normal child developmental stages
- b) Learning about the importance of the health-care professionals in promoting healthy mental development.
- c) Understanding the differences between normal and abnormal child development.

**4. Risk and protective factors in child mental development**

AIMS:

- a) Understanding the risk factors that have a negative impact on mental health and development.
- b) Understanding the importance of protective factors and health-professionals role in creating a protective environment for the child.

**5. Assessing families**

AIMS:

- a) Understanding the importance of the family in child development
- b) The importance of forming positive relations with the family for health-care professional
- c) Understanding developmental stages and common problems of the families.
- d) Using genogram to assess families.

**6. Child abuse and neglect**

AIMS:

- a) Understanding childrens's rights and role of health care professional in child protection issues.
- b) Understanding the negative impact of child abuse and neglect on child mental development.
- c) Being able to correctly identify the signs of child abuse and neglect.

## **7. Normal development in adolescence**

AIMS:

- a) Learning about the importance of knowing normal adolescent development when dealing with the adolescent patient.
- b) Understanding the developmental changes in adolescence.
- c) Differentiating age related problems of adolescence from psychiatric disorders.
- d) Learning to relate to an adolescent patient.
- e) Understanding the importance of promoting healthy development in adolescence in preventive psychiatry.

## **8. Common adolescent problems**

AIMS:

- a) Learning about the problems that may be a matter of concern for adolescent age group.
- b) Understanding the problems of the adolescent and his/her family.

## **9. Pervasive developmental disorders**

AIMS:

- a) Being able to identify the signs and symptoms of autism and other pervasive developmental disorders.
- b) Being able to give guidance to autistic child's family

## **10. Mental retardation**

AIMS:

- a) Learning about the etiology of mental retardation.
- b) Learning about the professional approach to mentally retarded patient.
- c) Learning about assessment of mental retardation.

## **11. Attention deficit hyperactivity disorder and conduct disorder**

AIMS:

- a) Learning about the etiology and treatment of ADHD
- b) Being able to identify the signs and symptoms of ADHD
- c) Being able to identify the signs and symptoms of conduct disorder
- d) Understanding the relationship of conduct disorder and adolescent delinquency

## **12. Tics and Tourette's disorder**

AIMS:

- a) Learning about the etiology and treatment of movement disorders of childhood.
- b) Being able to identify the signs and symptoms of movement disorders.

## **13. Enuresis and encopresis**

AIMS:

- a) Understanding the normal and abnormal development of bladder and bowel control.
- b) Learning the approach to enuretic child and the family.
- c) Learning about the etiology of encopresis.
- d) Learning about the treatment of enuresis and encopresis.

## **14. Separation anxiety disorder and other childhood anxiety disorders**

AIMS:

- a) Understanding the role of anxiety in normal child development.
- b) Understanding the importance of the attachment process in healthy development.
- c) Differentiating pathological anxiety from normal developmental anxiety.
- d) Understanding the etiology of separation anxiety disorder.
- e) Learning about the approach to anxious child and family.
- f) Learning about childhood fears and phobias.
- g) Learning about the treatment of childhood anxiety disorders.

### **15. Mood disorders in childhood and adolescence**

AIMS:

- a) Being able to identify the signs and symptoms of depression and mania in children and adolescents.
- b) Learning about the etiology and treatment of mood disorders in childhood and adolescence.
- c) Understanding the importance of diagnosing mood disorders in children and adolescents in terms of preventive mental health care.

### **16. Psychiatric treatments of child and adolescent mental disorders.**

AIMS:

#### **a) Psychotherapies**

#### **b) Psychopharmacologic treatments**

- a) Learning about the importance of psychotherapy in child and adolescent psychiatry.
- b) Learning about family therapy, behavioral approaches to child mental disorders, cognitive therapy, play therapy and family guidance.
- c) Understanding the basic principles of drug treatments in child and adolescent psychiatry.
- d) Learning about the pharmacologic agents that are used for child mental health disorders.

<b>I. WEEK</b>					
	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
<b>08:40 – 09:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>09:40 – 10:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>10:40 – 11:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>11:30 – 12:30</b>	PRACTICE	PRACTICE	PRACTICE	PRACTICE	PRACTICE
<b>13:40 – 14:30</b>	Introduction to child and adolescent psychiatry Psychiatric assesment of the child. <b>E.Z.Kılıç</b>	Risk and protective factors in child mental development <b>E.Z.Kılıç</b>	Normal development in adolescence <b>E.Z.Kılıç</b>	Attention deficift hyperactivity disorder and conduct disorder. <b>O.Zahmacioğlu</b>	. Seperation anxiety disorder and other childhood anxiety disorders. <b>E.Z.Kılıç</b>
<b>14:40 – 15:30</b>	Understanding normal and deviant mental development <b>E.Z.Kılıç</b>	Assessing families <b>E.Z.Kılıç</b>	Common adolescent problems and relations with family <b>E.Z.Kılıç</b>	Pervasive developmental disorders <b>O.Zahmacioğlu</b>	Psychiatric treatments of child and adolescent mental disorders: Pscyhotherapies and Pharmacological treatments <b>E.Z.Kılıç</b>
<b>15:40 – 16:30</b>	Mental retardation <b>O.Zahmacioğlu</b>	Child abuse and neglect <b>O.Zahmacioğlu</b>	Mood disorders in childhood and adolescence  <i>O.Zahmacioğlu</i>	Tics and Tourette's disorder Enuresis and encopresis <b>O.Zahmacioğlu</b>	<b>EXAM</b>



**YEDİTEPE UNIVERSITY FACULTY OF MEDICINE**  
**OPHTHALMOLOGY (3 weeks)**

**EYE DISEASES**

**INSTRUCTURS**

Ferda Çiftçi,MD Prof.  
Demir Başar,MD Prof.  
Belkıs Ilgaz Yalvaç,MD Prof.  
Prof. Raciha Beril Küçümen, MD Assoc.  
Assoc.Prof. Sinan Tatlıpınar, MD Assoc.  
Assoc.Prof. Şule Ziylan, MD Assoc.  
Canan Aslı Yıldırım ( Utine ) ,MD Assist.Prof.  
Deniz Oral,MD Assist.Prof.  
Ebru Görgün,MD Assist.Prof.  
Muhsin Altunsoy,MD Assist.Prof.  
Nursal Melda Yenerel,MD Assist.Prof.  
Umut Aslı Dinç,MD Assist.Prof.  
Vildan Öztürk,MD Assist.Prof.

**SUBJECTS**

Anatomy and Methods of Examination  
Refractive Errors  
Lids and Orbit  
Tear Film and Lacrymal Apparatus  
Conjunctiva and Cornea  
Uveal Tract  
Dieases of the Lens  
Glaucoma  
Retinal Vascular Diseases  
Macular Degenerations and Retinal Dystrophies  
Retinal Detachment  
Pediatric Ophthalmology and Strabismus  
Neuro –Ophthalmology

**Anatomy and Methods of Examination**

Learning Objectives:

- 1.The anatomy of the eye and the orbit
- 2.The main ophthalmic examination methods

You should be able to:

- Learn essentials of ocular anatomy,
- Measure and record visual acuity,
- Asses pupillary reflexes,
- Evaluate ocular motility,
- Use ophthalmoscope for fundus examination and assesment of the red reflex,
- Evaluate visual fields by confrontation.

**Refractive Errors**

Learning Objectives:

1. Emmetropia
2. Hyperopia
3. Astigmatism
4. Presbyopia
5. Their corrections

You should be able to:

As a primary care physician, basic knowledge on the refractive errors, their roles in decreased visual acuity and the means of correcting the refractive errors is essential.

After taking this class, the medical students should be able to know and interpret on:

- The refractive elements of the eye and emmetropisation process,
- The classification and etiologies of refractive errors,
- The options in rehabilitation of the refractive errors of the eye; which include spectacles, contact lenses and different types of refractive surgery.

### **Diseases of the Eyelids and Orbit**

Learning Objectives

#### 1. Diseases of eyelids

- Tumors
- Infections
- Malpositions
- Motility problems

#### 2. Diseases of the orbit

- Inflammatory disorders
- Diagnosis and differential diagnosis of orbital pathologies

You should be able to:

- Learn the definitions and differential diagnosis of the benign lesions and malpositions of the eyelids, disorders of the eyelashes and eyelid tumors,
- Understand the etiological factors that play role in eyelid pathologies, to see examples of clinical findings and to understand the general principles of treatment,
- Know the general classification of the inflammatory and infectious disorders of the orbita,
- Learn the diagnostic approaches, differential diagnosis and principles of treatment in orbital pathologies,
- See the clinical signs and to know the general management approaches to thyroid related orbitopathy.

### **Tear Film and Lacrymal Apparatus**

Learning objectives

#### 1. The tear-forming and tear-conducting system

- Lacrimal glands,
- Eyelid margins,
- Conjunctival sac,
- Tear drainage system.

#### 2. Dry eye syndrome

- Symptoms
- Detection and Diagnosis
- Etiology
- Treatment Surgery

#### 3. Infections of Lacrimal Passages

- Symptoms
- Detection and Diagnosis
- Etiology

- a) Congenital nasolacrimal duct obstruction
- b) Congenital dacryocoele
- c) Chronic canaliculitis
- d) Dacryocystitis

- Treatment Surgery

You should be able to:

- Know the definition of lacrimal apparatus: The tear-forming and tear-conducting system which includes the lacrimal glands, eyelid margins, conjunctival sac, and the tear drainage system,
- Examine glands in the upper eyelids which produce aqueous tears (the watery middle layer of the tear film),
- Obtain tear production system and tear film,
- Evaluate the nasolacrimal drainage system.

## **Conjunctiva and Cornea**

### A.- Disorders of the conjunctiva

#### Learning objectives

1. Infections ( various forms of conjunctivitis)
2. Allergic conjunctivitis
3. Degenerative lesions (Pterygium)
4. Pigmented lesions and tumours
5. Conjunctival hemorrhage and red eye

You should be able to:

- Describe the classification of conjunctivitis and forms of conjunctival infections
- Set out the major causes of conjunctivitis and their treatment
- Describe conjunctival hemorrhage, pterygium, red eye and their differential diagnosis

### B- Disorders of the cornea

#### Learning objectives

1. Infections (keratitis)
2. Ectatic corneal diseases
3. Dystrophies and degenerations
4. Corneal surgery

You should be able to:

- Describe the classification of keratitis and forms of corneal infections
- Set out the major causes of keratitis and their treatment
- Describe ectatic corneal diseases
- Describe different sorts of corneal surgery

## **Diseases of the Uveal Tract**

#### Learning objectives

1. Anatomy
2. Classification of uveitis
3. Clinical aspects of uveitis
4. Etiology of uveitis
5. Work-up for uveitis
6. Treatment

You should be able to:

- Describe the anatomy of the uveal tract,
- Describe the physiology of the uveal tract,
- Describe the possible pathologies of the uveal tract,
- Describe the classification of uveitis according to the location,
- Describe the classification of uveitis according to the onset of symptoms,
- Describe the findings of uveitis,
- Describe the clinical findings of the ophthalmological examination,
- Describe the etiology of uveitis,
- Set the major systemic diseases causing uveitis,
- Describe the available treatment options.

## **Diseases of the Lens**

#### Learning objectives

1. Classification of lens diseases
2. Clinical aspects of lens diseases
3. Work-up for lens diseases
4. Treatment Surgery

You should be able to:

- Describe the anatomy of the lens,
- Describe the physiology of the lens,
- Describe the classification of lens diseases and cataracts (congenital, traumatic, senile, toxic..),
- Describe the clinical findings of lens diseases,
- Describe the clinical findings of ophthalmological examination of the lens,
- Know the systemic diseases causing cataract,
- Know the systemic diseases causing lens luxations,
- Discuss the ancillary and diagnostic tests for the diagnosis of cataract,
- Describe the basics of treatment modalities.

## **Glaucoma**

Learning objectives

1. Description of glaucoma
2. Classification of glaucoma
3. Clinical aspects of glaucoma
4. Treatment Surgery

You should be able to:

- Describe the glaucoma and its classification,
- Interpret the common symptoms and signs of glaucoma and construct a differential diagnosis of glaucoma based on clinical presentations,
- Discuss the genetic aspects of adult and congenital glaucomas,
- Set out the principles of medical and surgical management of the glaucoma.

## **Retinal Vascular Diseases**

Learning objectives:

1. Retinal vascular anatomy
2. Classification
3. Clinical aspects
4. Treatment modalities

You should be able to:

- Become familiar with the retinal vascular anatomy and important landmarks.
- Recognize the ocular signs, symptoms and complications of the most common systemic diseases that are associated with retinal vascular pathologies, such as diabetes mellitus and hypertension.
- Determine when it is appropriate to refer a patient to an ophthalmologist for consultation or treatment.

## **Macular Degenerations and Retinal Dystrophies**

Learning objectives

1. Clinical aspects of macular degenerations and hereditary retinal dystrophies
2. Classification
3. Etiology
4. Treatment

You should be able to:

- Describe the classification of macular degenerations and hereditary retinal dystrophies,
- Describe the findings of macular degenerations and hereditary retinal dystrophies,
- Describe the clinical meanings of the ophthalmological examination,
- Describe the known etiological factors of macular degenerations and hereditary retinal dystrophies,
- Describe the work-up for macular degenerations and retinal dystrophies,
- Discuss the ancillary and diagnostic tests used in ophthalmology for the recognition/differential diagnosis of macular degenerations and hereditary retinal dystrophies,
- Know the treatment options

## **Retinal Detachment**

### Learning Objectives

1. Anatomical consideration
2. Pathogenesis of tear formation
3. Importance of vitreo-retinal changes
4. Visual impairment due to detached retina

You should be able to:

- Answer what keeps the retina attached,
- Describe anatomical alterations and mechanical forces leading to retinal breaks,
- Understand the role of aging processes in vitreous and retina,
- Know the fluid dynamics within the eye leading to detachment,
- Surgical treatment

## **Tumors of the Eye**

Will be covered under related topics.

## **Pediatric Ophthalmology and Strabismus**

### Learning Objectives

Strabismus:

#### 1. Esodeviations

- Infantile strabismus
- Accommodative Esotropia
- Non-accommodative Esotropia
- Incomitant Esotropia

#### 2. Exodeviations

#### 3. Vertical deviations

#### 4. Special forms of strabismus

#### 5. Treatment

#### 6. Visual acuity examination in babies and little children

#### 7. Retinopathy of prematurity

- Etiology,
- Diagnosis and treatment

#### 8. Eye tumours in children

- Retinoblastoma

You should be able to :

- Explain clinical forms of strabismus, when and how it happened, which types of strabismus needs eye glasses and can be treated with eye glasses, which types of strabismus may need surgery, and the clinical aspects of the special forms of strabismus.

Ocular muscles:

#### 1. The anatomy of the eye muscles

#### 2. Movement of eye muscles

#### 3. Innervation of eye muscles

You should be able to:

- Describe the anatomy of eye muscles and their innervations, explain the movement of the eyes,
- Muscle actions in gaze positions,
- Evaluate the need for examination of children considering eye diseases such as retinoblastoma ,
- Retinopathy of prematurity.

## Neuro –Ophthalmology

### Learning objectives

1. The classification of neuroophthalmologic diseases
2. The neuroophthalmologic examination methods
3. The clinical aspects of basic neuroophthalmologic diseases

You should be able to:

- To perform a basic neuro-ophthalmic examination and recognize and interpret the more common signs and symptoms of neuro-ophthalmic disorders,
- To examine pupillary reactions,
- To test the function of the extraocular muscles,
- To evaluate visual fields by confrontation,
- To inspect the optic nerve head by direct ophthalmoscopy and differentiate major alterations.

### THEORETICAL EDUCATION PROGRAMME

(2010-2011)

WEEK 1	DAY	SUBJECT	LECTURER
	1	Anatomy and Methods of Examination	M. ALTUNSOY
	2	Lids and Orbit	D. ORAL
	3	Refractive Errors	C.A.UTİNE
	4	Tear Film and Lacrymal Apparatus	F. ÇİFTÇİ
	5	Uveal Tract	A.UMUT DİNÇ
WEEK 2	DAY	SUBJECT	LECTURER
	1	Diseases of the Lens	B. KÜÇÜMEN
	2	Glaucoma	B. I. YALVAÇ
	3	Conjunctiva and Cornea	V.ÖZTÜRK
	4	Retinal Vascular Diseases	M. YENEREL
	5	Macular Degeneration and Hereditary Retinal Dystrophies	S.TATLIPINAR
WEEK 3	DAY	SUBJECT	LECTURER
	1	Retinal Detachment	D. BAŞAR
	2	Pediatric Ophthalmology and Strabismus	S.ZIYLAN
	3	Neuro – Ophthalmology	E. GÖRGÜN
	4	Practice	

The lectures will take place in the meeting room on Floor 1.

# **YEDITEPE UNIVERSITY FACULTY OF MEDICINE OTORHINOLARYNGOLOGY & HEAD AND NECK SURGERY**

## **Objectives and Underlying Philosophy**

The integrated Yeditepe Otolaryngology & Head and Neck Surgery student training program is designed to produce medical doctors who are also well trained and productive investigators receive broad, closely supervised training and experience in diagnosis and treatment of diseases and abnormalities of the ear, nose, throat, sinuses, larynx, esophagus, trachea, bronchi, and lungs. Responsibility increases gradually until competence is achieved in the medical and surgical treatment of disorders of the head and neck, including ablative and reconstructive surgery for cancer, maxillofacial trauma, plastic and reconstructive surgery, microsurgery of the ear, salivary gland surgery, phonosurgery, and bronchoesophagology. The program integrates training at the Department of Otolaryngology & Head and Neck Surgery in main hospital building and Bagdat Outpatient Clinics.

The inclusion of basic science courses and training in the clinical program, combined with the recognized excellence of the school and faculty, provide a superior milieu for the development of teacher-investigators. In screening students, priority is given to those who intend to enter careers in research and academic medicine, whose previous records indicate that such intent is serious, and whose capabilities are commensurate with this objective. Although residents who do not desire academic careers certainly can profit from the superior academic training offered at Yeditepe, those who aspire only to practice the profession should seek programs whose emphasis is more strictly clinical.

## **Program Overview**

The integration of Yeditepe along with two affiliate medical centers provides quantity as well as high quality clinical material. Students receive their basic science, research and primary didactic training at the Yeditepe Medical Centers and serve three-week training at these institutions. This approach provides students with balanced experience in the management of general otolaryngology; facial trauma; bronchoesophagology; pediatric otolaryngology; as well as otologic, rhinologic, and head and neck tumor surgery.

An outstanding feature of the integrated program is the basic science instruction that is provided by faculty members from several departments within the Yeditepe University. The basic science and didactic courses and lectures are open to individuals from all training programs in the area, as well as from the Oral Maxillofacial Surgery Department at the Yeditepe Dental School.

In addition to the basic science courses, classic and current surgical techniques are incorporated in didactic and practicum courses in surgical head and neck anatomy and in temporal bone dissection. Courses include a comprehensive survey of all structures of the head, neck and thorax as they pertain to the specialty, as well as temporal bone and advanced temporal bone dissections.

## **Program Outline**

### **First Week (W-1)**

The training is specifically selected to benefit future head and neck training. In the Yeditepe program, first-week students are training in basic surgical techniques and in the management of pre- and post-operative surgical patients. Students attend various departmental and division conferences on a regular basis. A mentor from the Division of Head and Neck Surgery is assigned to each student to monitor progress through the program and to assist the student should any problems arise.

### **Second and Third Weeks (W-2 and W-3)**

These two weeks are devoted to the acquisition of a good foundation in the basic principles of otolaryngology. Students develop the ability to use the examining and surgical tools of the field under close supervision of the faculty. After achieving a basic knowledge of the procedures, they make daily inpatient staff rounds, assist in minor procedures under supervision. As part of the initial training experience, students are exposed to surgical pathology and radiology in order to gain proficiency in these fields.

Students' outpatient responsibilities include history-taking, most minor treatments, simple hearing testing under the auspices of an audiologist, training in clinical neuro-otological and vestibular examination procedures, and training in diagnostic and treatment procedures for voice and speech disorders. During this period, students are encouraged to develop relationships with faculty and observe various research laboratories. This exposure introduces students to the various investigators and research being conducted in the division laboratories and allows them to begin to select the laboratory and investigator that best fits their areas of interest during their future.

## **Student Teaching Responsibilities**

Each student plays an active role in medical student teaching. Training in otolaryngology at the Yeditepe University is included in all three weeks of the medical school curriculum. Members of the division lecture first-week medical students in basic anatomy and physiology related to the organs and structures of the otorhinolaryngology & head and neck. In the second week of training, the division teaches Introduction to Clinical Medicine. Time is utilized to master the ENT physical examination. Third-week medical students are assigned to the Otolaryngology & Head and Neck Surgery Service full-time for five days.

During this training, the faculty also provides 117 lectures (a series of eight given per day). Otolaryngology & Head and Neck Surgery provides in otology and participates in multi-disciplinary courses on the respiratory system, oncology, and trauma. Finally, research opportunities are available to pre-doctoral students in the summer and during free and elective time throughout their training.

The medical school training program thus provides opportunities for training and teaching medical students in the field of otolaryngology. It is the purpose of the program to stimulate interest among medical students in the broad field of otolaryngology, and to prepare residents for academic and research careers in this specialty. As a corollary, this type of program enhances the training of pediatric, family practice, general surgery, and other specialty residents, nurses and ancillary paramedical personnel, while upgrading the level of practice of otolaryngology in the community, in the area, and in the country.

Under this system, students assume significant responsibility for teaching themselves. This experience may serve the teacher to even better advantage than it does the pupil, and effectively cultivates the habit of teaching. The faculty serve as preceptors, advisors and counselors to all students are always available. It is, however, incumbent upon all residents to take a special interest in the students by encouraging and teaching them whenever possible. This, after all, is the primary reason for the existence of the medical school.



## PHASE V STUDENT TRAINING PROGRAM CURRICULUM

### SEQUENCE OF COURSES

Course Code	Course Name	Credit Hours
OTO 510	Diseases of the External Ear	1
OTO 511	Therapy of the External Ear Diseases	1
OTO 512	Diseases of the Middle Ear	1
OTO 513	Therapy of the Middle Ear Diseases	1
OTO 514	Diseases of the Inner Ear	1
OTO 515	Therapy of the Inner Ear Diseases	1
OTO 516	Hearing Loss	1
AUD 517	Conventional Hearing Aids	1
OTO 518	Middle Ear Implants & Implantable Temporal Stimulators	1
OTO 519	Cochlear & Brainstem Implants	1
AUD 520	Facilitating Hearing Technologies	1
AUD 521	Indications and Selection of Hearing Aids & Implants	1
AUD 522	Acoustics	1
AUD 523	Psychoacoustics	1
OTO 524	Inner Ear Physiology	1
OTO 525	Inner Ear Anatomy and Embryology	1
OTO 526	Middle Ear Physiology	1
OTO 527	Middle Ear Anatomy and Embryology	1
OTO 528	3D Temporal Bone & Ear Anatomy	1
ORL 529	Radiologic & Nuclear Imaging	1
ORL 530	History of the Otorhinolaryngology	1
ORL 531	Basic Principles of Medical Imaging	1
ORL 532	Being a Good Doctor & Otolaryngologist	1
ORL 533	Conventional Examination Techniques	1
ORL 534	Endoscopic Examination Techniques	1
ORL 535	Advanced Examination Techniques	1
ORL 536	Disease of the Facial Nerve	1
RHD 537	Nasal Physiology	1
RHD 538	Nasal Anatomy and Embryology	1
RHD 539	Physiology of the Paranasal Sinuses	1
RHD 540	Anatomy and Embryology of the Sinuses	1
RHD 541	Sinusitis	1
RHD 542	Rhinitis	1
RHD 543	Epistaxis	1
RHD 544	Nasal Tumors	1
RHD 545	Paranasal Sinus Tumors	1
ORL 546	Sleep Apnea & Snoring	1
RHD 547	Nasal Surgery	1
RHD 548	Paranasal Surgery	1
ORL 549	Nasopharyngeal Diseases	1
ORL 550	Oropharyngeal Diseases	1
LG 551	Tracheostomy	1
LG 552	Physiology of the Larynx	1
LG 553	Anatomy & Embryology of the Larynx	1
LG 554	Laryngitis & Laryngeal Reflux	1
LG 555	Laryngeal Neoplasms	1
LG 556	Laryngeal Oncological Surgery	1
LG 557	Voice Surgery	1
SLD 558	Voice Examination Techniques & Analysis	1
ORL 559	Oral Cavity Neoplasms	1
ORL 560	Salivary Gland Diseases	1
ORL 561	Salivary Gland Neoplasms	1
ORL 562	Salivary Gland Surgery	1
ORL 563	Neck Diseases	1
ORL 564	Neck Neoplasms	1
ORL 565	Differential Diagnosis of the Neck Masses	1
ORL 566	Neck Infections	1

ORL 567	Lymph Nodes Pathologies and Neck Dissections	1
ORL 568	Maxillo Facial Trauma	1
AUD 569	Tinnitus & Hyperacusis: Evaluation and Treatment	1
AUD 570	Essentials of Audiology I	1
AUD 571	Essentials of Audiology II	1
SLD 572	Speech Perception	1
AUD 573	Otoacoustic Emissions	1
AUD 574	Pediatric Audiology	1
AUD 575	Auditory Evoked Responses	1
AUD 576	Audiological Rehabilitation for Adults	1
AUD 577	Auditory Processing Disorders	1
ORL 578	Basic Neurology for Otorhinolaryngology	1
ORL 579	Basic Microbiology & Virology for Otorhinolaryngology	1
AUD 580	Vestibular Assessment	1
OTO 581	Vestibular Treatment	1
AUD 582	Occupational and Environmental Hearing Conservation	1
SLD 583	Speech and Language Disorders in Adults	1
SLD 584	Speech and Language Disorders in Children	1
ORL 585	Allergy in Otorhinolaryngology	1
ORL 586	Otoimmune Disorders in Otorhinolaryngology	1
AUD 587	The Aging Auditory and Balance System	1
ORL 588	Gene Therapy and Stem Cell Applications in Otorhinolaryngology	1
ORL 589	Diseases of the Skullbase	1
ORL 590	Stomatology & Dental Diseases	1
RHD 591	Anatomy and Physiology of the Olfaction System	1
ORL 592	Anatomy and Physiology of the Tasting System	1
RHD 593	Diseases of the Olfaction System	1
ORL 594	Diseases of the Tasting System	1
OTO 595	Embryology and Genetic Conditions in Otology	1
OTO 596	Acquired Auditory-Vestibular Disorders	1
OTO 597	Basic Pharmacology for Otology	1
AUD 598	Early Hearing Detection and Intervention	1
ORL 599	Diseases of the Tonsils & Adenoid	1
SLD 600	Voice & Speech Therapy	1
OTO 601	Urgencies in Otology	1
RHD 602	Urgencies in Rhinology	1
LG 603	Urgencies in Laryngology	1
ORL 604	Diseases of the Temporo Mandibular Joint	1
ORL 605	Rehabilitation of the Head and Neck Defects	1
ORL 606	Oncological Behaviour & Spreading of the Head and Neck Neoplasms	1
ORL 607	Pathological & Cytological Spectrum of the Head and Neck Neoplasms	1
ORL 608	Auxiliary Therapies of the Head and Neck Neoplasms	1
ORL 609	2D Anatomy of the Head and Neck	1
ORL 610	3D Anatomy of the Head and Neck	1
ORL 611	Endocrin Surgery I: Diseases of the Thyroid	1
ORL 612	Endocrin Surgery II: Diseases of the Parathyroid	1
ORL 613	Geriatric Diseases of the Otorhinolaryngology	1
ORL 614	Evolutionary Otorhinolaryngology	1
ORL 615	Cybernetics and Robotic Systems in Otorhinolaryngology	1
SLD 616	Phonetics	1
ORL 617	Facial Cosmetic Surgery	1
ORL 618	Velopalatine Insufficiency	1
ORL 619	Cleft Lip and Palate	1
ORL 620	Vascular Malformations of the Head and Neck	1
LG 621	Diseases of the Laryngotracheal Skeleton	1
SLD 622	Introduction to the Vocology	1
ORL 623	Orthognathic Surgery	1
ORL 624	Swallowing Disorders	1
SLD 625	Voice Disorders	1
ORL 626	LASER Applications in Otorhinolaryngology	1

<b>PHASE V STUDENT TRAINING SCHEDULE</b>					
<b>FIRST WEEK</b>					
	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
09:00-09:45	History of the Otorhinolaryngology	Middle Ear Physiology	Radiologic & Nuclear Imaging	Basic Neurology for Otorhinolaryngology	Early Hearing Detection and Intervention
10:00-10:45	Conventional Examination Techniques	Diseases of the Middle Ear	Basic Principles of Medical Imaging	Acoustics	Anatomy & Embryology of the Larynx
11:00-11:45				Disease of the Facial Nerve	Otoacoustic Emissions
12:00-12:45	Being a Good Doctor & Otolaryngologist	Therapy of the Middle Ear Diseases	3D Temporal Bone & Ear Anatomy		
13:00-13:45	Endoscopic Examination Techniques	Inner Ear Anatomy and Embryology	2D Anatomy of the Head and Neck	Psychoacoustics	Physiology of the Larynx
14:00-14:45	Advanced Examination Techniques	Inner Ear Physiology	Acquired Auditory-Vestibular Disorders	Anatomy and Physiology of the Tasting System	Auditory Evoked Responses
15:00-15:45	Diseases of the External Ear	Diseases of the Inner Ear	Embryology and Genetic Conditions in Otology	Essentials of Audiology I	Laryngitis & Laryngeal Reflux
16:00-16:45	Therapy of the External Ear Diseases	Therapy of the Inner Ear Diseases	Urgencies in Otology	Stomatology & Dental Diseases	Conventional Hearing Aids
17:00-17:45	Middle Ear Anatomy and Embryology	Hearing Loss	Basic Pharmacology for Otology	Essentials of Audiology II	Diseases of the Laryngotracheal Skeleton

<b>PHASE V STUDENT TRAINING SCHEDULE</b>					
<b>SECOND WEEK</b>					
	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
09:00-09:45	Oropharyngeal Diseases	Anatomy and Embryology of the Sinuses	Allergy in Otorhinolaryngology	Diseases of the Olfaction System	Tinnitus & Hyperacusis: Evaluation and Treatment
10:00-10:45	Diseases of the Tasting System	Physiology of the Paranasal Sinuses	Stomatology & Dental Diseases	Auditory Processing Disorders	Laryngeal Neoplasms
11:00-11:45				Maxillo Facial Trauma	Occupational and Environmental Hearing Conservation
12:00-12:45	Middle Ear Implants & Implantable Temporal Bone Stimulators	Epistaxis	Sleep Apnea & Snoring		
13:00-13:45	Oral Cavity Neoplasms	Sinusitis	Nasopharyngeal Diseases	Pediatric Audiology	Swallowing Disorders
14:00-14:45	Cochlear & Brainstem Implants	Nasal Tumors	Evolutionary Otorhinolaryngology	Urgencies in Rhinology	Audiological Rehabilitation for Adults
15:00-15:45	Nasal Anatomy and Embryology	Paranasal Sinus Tumors	Diseases of the Tonsils & Adenoid	Vestibular Assessment	Tracheostomy
16:00-16:45	Nasal Physiology	Nasal Surgery	Facial Cosmetic Surgery	Diseases of the Skullbase	Indications and Selection of Hearing Aids & Implants
17:00-17:45	Rhinitis	Paranasal Surgery	Anatomy and Physiology of the Olfaction System	The Aging Auditory and Balance System	Laryngeal Oncological Surgery

**PHASE V STUDENT TRAINING SCHEDULE**

**THIRD WEEK**

	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
09:00-09:45	Neck Diseases	Neck Infections	Diseases of the Temporo Mandibular Joint	Orthognathic Surgery	Phonetics
10:00-10:45	Salivary Gland Diseases	Neck Neoplasms	Urgencies in Laryngology	Facilitating Hearing Technologies	Velopalatine Insufficiency
11:00-11:45				Speech Perception	Voice Disorders
12:00-12:45	3D Anatomy of the Head and Neck	Gene Therapy and Stem Cell Applications in Otorhinolaryngology	Rehabilitation of the Head and Neck Defects		
13:00-13:45	Endocrin Surgery I: Diseases of the Thyroid	Congenital Head & Neck Masses	Geriatric Diseases of the Otorhinolaryngology	Speech and Language Disorders in Adults	Voice Surgery
14:00-14:45	Vestibular Treatment	Signs & Syndromes in Otorhinolaryngology	Cybernetics and Robotic Systems in Otorhinolaryngology	Basic Microbiology & Virology for Otorhinolaryngology	Voice Examination Techniques & Analysis
15:00-15:45	Salivary Gland Neoplasms	Oncological Behaviour & Spreading of the Head and Neck Neoplasms	Vascular Malformations of the Head and Neck	Speech and Language Disorders in Children	Cleft Lip and Palate
16:00-16:45	Endocrin Surgery II: Diseases of the Parathyroid	Pathological & Cytological Spectrum of the Head and Neck Neoplasms	Differential Diagnosis of the Neck Masses	Lymph Nodes Pathologies and Neck Dissections	Voice & Speech Therapy
17:00-17:45	Salivary Gland Surgery	Auxiliary Therapies of the Head and Neck Neoplasms	Otoimmune Disorders in Otorhinolaryngology	Introduction to the Vocology	LASER Applications in Otorhinolaryngology

**CLOSING REMARKS & EXAMINATIONS**

SATURDAY 10:00 – 14:00

## LEARNING OBJECTIVES OF SAMPLE LECTURES

### Indications and Selection of Hearing Aids & Implants

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Selection, fitting, and adjustments of hearing aids. Understanding amplitude compression, characteristics, frequency compression technology, digital and programmable hearing aids, and specialized microphone configurations. Focus is on new cutting edge technology. Content to change as needed. Includes laboratory requirement.

### Acoustics

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**Acoustics** is the interdisciplinary science that deals with the study of [sound](#), [ultrasound](#) and [infrasound](#) (all mechanical waves in gases, liquids, and solids). A scientist who works in the field of acoustics is an [acoustician](#). The application of acoustics in technology is called [acoustical engineering](#). There is often much overlap and interaction between the interests of acousticians and acoustical engineers.

[Hearing](#) is one of the most crucial means of survival in the animal world, and [speech](#) is one of the most distinctive characteristics of human development and culture. So it is no surprise that the science of acoustics spreads across so many facets of our society—music, medicine, architecture, industrial production, warfare and more. Art, craft, science and technology have provoked one another to advance the whole, as in many other fields of knowledge.

The word "acoustic" is derived from the [Greek](#) word *ἄκουστικός* (*akoustikos*), meaning "of or for hearing, ready to hear"<sup>[1]</sup> and that from *ἄκουστός* (*akoustos*), "heard, audible"<sup>[2]</sup>, which in turn derives from the verb *ἀκούω* (*akouo*), "I hear"<sup>[3]</sup>. The Latin synonym is "sonic". After acousticians had extended their studies to [frequencies](#) above and below the audible range, it became conventional to identify these frequency ranges as "ultrasonic" and "infrasonic" respectively, while letting the word "acoustic" refer to the entire frequency range without limit.

### Psychoacoustics

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Hearing is not a purely mechanical phenomenon of wave propagation, but is also a sensory and perceptual event. When a person hears something, that something arrives at the [ear](#) as a mechanical sound wave traveling through the air, but within the ear it is transformed into neural [action potentials](#). These nerve pulses then travel to the brain where they are perceived. Hence, in many problems in [acoustics](#), such as for [audio processing](#), it is advantageous to take into account not just the mechanics of the environment, but also the fact that both the ear and the brain are involved in a person's listening experience.

The [inner ear](#), for example, does significant [signal processing](#) in converting sound [waveforms](#) into neural stimulus, so certain differences between waveforms may be imperceptible.<sup>[1]</sup> [Audio compression](#) techniques, such as [MP3](#), make use of this fact.<sup>[2]</sup> In addition, the ear has a nonlinear response to sounds of different [loudness](#) levels. [Telephone networks](#) and audio [noise reduction](#) systems make use of this fact by nonlinearly compressing data samples before transmission, and then expanding them for playback.<sup>[3]</sup> Another effect of the ear's nonlinear response is that sounds that are close in frequency produce phantom beat notes, or [intermodulation](#) distortion products.<sup>[4]</sup>

### Inner Ear Anatomy and Embryology

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Study of the structure and function of the Auditory-Vestibular System.

### Basic Principles of Medical Imaging

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Understanding imaging techniques for evaluation of auditory and vestibular pathologies and the correlation with audiological data, including conventional X-Rays, CT scans, MRI, fMRI, and PET.

### Professionalism and Leadership

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Discussion of the attributes of a profession, intra- and inter-professional relations, and referral methods. Also included will be discussion of the organization and function of professional associations, activities that serve the professional community and service to the public.

### Tinnitus & Hyperacusis: Evaluation and Treatment

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An in-depth and critical review of the current and past research on the origins of tinnitus. Assessment techniques and the various treatment options available for remediation are compared and contrasted in detail. Includes laboratory requirement.

### Auditory Science

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A detailed study of acoustics, including properties of sound and sound measurement and analysis techniques. Psychometric methods and a study of the range of normal human perceptual abilities: intensity, frequency, and temporal resolution.

### Essentials of Audiology I

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First of a two-course sequence covering otoscopic evaluation, pure tone air- and bone-conduction testing, and speech thresholds. Tuning fork tests, instrument calibration and analysis of sensitivity/specificity functions will be covered. Includes laboratory requirement.

### Essentials of Audiology II

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This is the second in a two-course sequence. Includes detailed study of conventional audiometric techniques, focusing on speech audiometry, masking, difficult-to-test populations and immittance measures. Includes laboratory requirement.

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### **Speech Perception**

The study of the acoustics of speech and a survey of models of speech perception and processing of speech. Includes laboratory requirement.

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### **Otoacoustic Emissions**

The origin and classification of otoacoustic emissions will be studied. Test equipment and procedures for obtaining otoacoustic emissions. Interpretation of results and uses of OAE data in screening and differential diagnosis of auditory disorders. Includes laboratory requirement.

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### **Pediatric Audiology**

Study of the normal and abnormal development of auditory behavior in infants and children. Review of normal motor, cognitive, language, and psychosocial development. Will cover universal newborn hearing screening, identification audiometry, diagnostic audiometry, hearing aids, and counseling. Practical applications for the difficult-to-test child will be covered. Includes laboratory requirement.

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### **Auditory Evoked Responses**

Detailed study into the principles and methods of evoked response testing. Techniques for performing EcochG and ABR. Interpreting results and the relation of data to neuroanatomy and physiology of the auditory system. Includes laboratory requirement.

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### **Audiological Rehabilitation for Adults**

Topics include rehabilitation evaluation and use of self-assessment instruments; teaching the patient and family listening and helping skills, as well as other methods to enhance communication and sound awareness through individual or group communication; and meeting the rehabilitative needs of the aging population.

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### **Auditory Processing Disorders**

This course sequence covering the assessment and management of auditory processing disorders. Topics in this sequence include differential diagnosis of auditory processing disorders through the use of case history, questionnaires, speech audiometric tests, non-speech tests and electrophysiologic measurements, and appropriate counseling and remediation for patients and their families. Includes laboratory requirement.

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### **Basic Neurology for Otorhinolaryngology**

A study of the development, structure, and function of the central and peripheral nervous systems, including the autonomic nervous system. Blood supply, sensory and motor systems, pain mechanisms, receptors, reflex pathways, and consequences of lesions of the nervous system at various levels are also discussed. Includes laboratory requirement.

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### **Vestibular Assessment**

Assessing disorders of the vestibular system and the underlying anatomical and physiological bases. Focusing on differential diagnosis of the pathologies using ENG, VNG, VAT, posturography, sensory organization testing, rotational chair testing, vestibular evoked myogenic potentials and other techniques. Includes laboratory requirement.

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### **Vestibular Treatment**

This course sequence covering assessment and treatment of vestibular disorders. It will provide a continuation of vestibular assessment procedures followed by coverage of recommendations and treatment procedures for patients with balance disorders. Topics include medical referrals, medical treatment, surgery, canalith repositioning; vestibular rehabilitation and balance re-training (adaptation, substitution, and combined therapeutic strategies). Includes laboratory requirement.

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### **Occupational and Environmental Hearing Conservation**

The measurement of, effects of, and management of occupationally related hearing loss, recreational noise exposure and its sequela. Industrial and forensic audiology will be discussed in detail. OSHA, MSHA, and NIOSH regulations will be covered. Includes laboratory requirement.

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### **Speech and Language Disorders in Adults**

This course is designed to cover the theory and techniques for the differential diagnosis and treatment of speech and language disorders in adults. Students will learn to administer and interpret common diagnostic tests. Students will learn about treatment approaches for various disorders. Topics to be included are: traumatic brain injuries, aphasias, dysarthria, apraxia, dysphagia, voice disorders, and other neurological disorders such as Parkinson's.

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### **Speech and Language Disorders in Children**

This course is designed to cover the theory and techniques for the diagnosis and treatment of speech and language disorders in children from preschool through school-age. Students will learn to administer and interpret common diagnostic tests. Students will learn to develop remediation plans and implement the remediation lessons.



## **The Aging Auditory and Balance System**

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A study of the normal and pathological changes associated with aging, covering anatomical, physiological, and psychosocial factors.

## **Embryology and Genetic Conditions in Otology**

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This course covers embryologic development with emphasis on normal and abnormal or interrupted development. Genetic concepts and terminology will be covered together with information regarding the association of certain organ systems with audiovestibular system impairments. Material will also include information regarding genetic testing, genetic counseling, and the audiologist's role and responsibilities in identifying and managing these conditions.

## **Acquired Auditory-Vestibular Disorders**

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Study of the acquired disorders affecting the auditory and vestibular system, both peripheral and central. Topics will include disorders of the conductive, sensory, neural, and central auditory and vestibular systems; their etiologies; and presentation of symptoms. Related examination findings and treatment options will be discussed.

## **Basic Pharmacology for Otology**

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The effects of prescription and non-prescription drugs, environmental chemicals, and noise on the auditory-vestibular system. Focus is on basic pharmacology and the interaction of drugs and noise. The classes of medications used in routine clinical medical practice will be examined with emphasis on activity, mode of action, side effects, toxicity, and drug interactions.

## **Early Hearing Detection and Intervention**

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A comprehensive introduction to the role of the audiologist in Early Hearing Detection and Intervention (EHDI) programs. Topics include: legislative mandates, organization and administration of EHDI programs, data management and tracking, early intervention for infants and their families, transition to the educational system, as well as a comprehensive review of current literature related to newborn hearing screening, diagnosis, and amplification.

## **Phonetics**

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**Phonetics** (from the [Greek](#): [φωνή](#), *phōnē*, "sounds, voices", pronounced /fəˈnɛtɪks/) is a branch of [linguistics](#) that comprises the study of the [sounds](#) of human [speech](#).<sup>[1]</sup> It is concerned with the physical properties of speech sounds ([phones](#)): their physiological production, acoustic properties, auditory perception, and neurophysiological status. [Phonology](#), on the other hand, is concerned with a given sound's contribution to the language as a system.

Phonetics was studied as early as 2500 years ago in [ancient India](#), with [Pāṇini](#)'s account of the [place](#) and [manner of articulation](#) of consonants in his [5th century BC](#) treatise on [Sanskrit](#). The major [Indic alphabets](#) today order their consonants according to Pāṇini's classification. The [Ancient Greeks](#) are credited as the first to base a writing system on a phonetic alphabet. Modern phonetics began with [Alexander Melville Bell](#), whose [Visible Speech](#) (1867) introduced a system of precise notation for writing down speech sounds.<sup>[2]</sup>

Phonetics as a research discipline has three main branches:

- [articulatory phonetics](#) is concerned with the articulation of speech: The position, shape, and movement of [articulators](#) or [speech organs](#), such as the lips, tongue, and [vocal folds](#).
- [acoustic phonetics](#) is concerned with [acoustics](#) of speech: The properties of the [sound waves](#), such as their [frequency](#) and [harmonics](#).
- [auditory phonetics](#) is concerned with [speech perception](#): How speech sounds are categorized, recognized, and interpreted by the auditory apparatus and the brain.

## **Introduction to the Vocology**

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**Vocology** is the science of enabling or endowing the [human voice](#) with greater ability or fitness.<sup>[1][2][3][4][5]</sup> Its concerns include the nature of [speech and language pathology](#), the defects of the [vocal tract](#) ([laryngology](#)), the remediation of [speech therapy](#) and the [voice training](#) and [voice pedagogy](#) of [song](#) and [speech](#) for [actors](#) and [public speakers](#).

## **Orthognathic Surgery**

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**Orthognathic surgery** (pronounced /ˌɔrθəɡˈnæθɪk/, US dict: [ôrˈthəg-nāthˈɪk](#)) is [surgery](#) to correct conditions of the [jaw](#) and [face](#) related to structure, growth, [sleep apnea](#), [TMJ](#) disorders or to correct [orthodontic](#) problems that cannot be easily treated with braces. Originally coined by Dr. Harold Hargis, D.M.D., it is also used in treatment of congenital conditions like [cleft palate](#).<sup>[1]</sup> Bones can be cut and re-aligned, held in place with either screws or plates and screws.

## **Voice Disorders**

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**Voice disorders**<sup>[1]</sup> are medical conditions affecting the production of [speech](#). These include:

- [Chorditis](#)
- [Vocal fold nodules](#)
- [Vocal fold cysts](#)
- [Vocal cord paresis](#)
- [Reinke's Edema](#)
- [Spasmodic dysphonia](#)
- [Foreign accent syndrome](#)
- [Bogart-Bacall Syndrome](#)
- [Laryngeal papillomatosis](#)
- [Puberphonia](#)



**YEDITEPE UNIVERSITY FACULTY OF MEDICINE & SSK GOZTEPE HOSPITAL  
PEDIATRIC MINISTRY OF HEALTH GÖZTEPE RESEARCH AND TRAINING  
HOSPITAL SURGERY DEPARTMENTS  
PEDIATRIC SURGERY (2 WEEKS)**

Hamit Okur, MD Prof. (CC)

Selami Sözübir, MD Prof. (CC)

Çiğdem Ulukaya-Durakbaşı, MD Assoc. Prof.

Murat Mutuş, MD

Meltem Çağlar, MD

Mevlut Korkmaz, MD

- **Definition**

Pediatric Surgery is the field of medicine that encompasses a broad range of diseases and malformations, both operative and non-operative, from the fetal period until the end of childhood (0-18 years). In addition to the body systems covered by general surgery, Pediatric Surgery also deals with non-cardiac thoracic conditions and specific genito-urinary and gynecological problems in children.

- **Aims**

- To become familiar with the recognition, natural history, and general and specific treatment of those pediatric surgical conditions that one would expect to encounter in general medical practice in a community lacking the immediate availability of a pediatric surgeon.
- To familiarize oneself with the pathophysiology of pediatric surgical conditions, and the response of a child to surgery and trauma.

- **Educational Goals**

The 5th year program in Pediatric Surgery is intended to build on students' knowledge of surgical principles and the practice of General Surgery and Pediatrics acquired in years 1-4, and to introduce the student to the surgical treatment of diseases of the following parts of the children's body: the head and neck, digestive tract, the skin, the soft tissues, the genitourinary tract and the respiratory tract .

Students are expected to continue to demonstrate their mastery of learning objectives in the domains of Learning Skills, Clinical Skills, Practical Skills and Principles of Surgery.

- **Educational Objectives**

Clinical Skills

Given a patient with a pediatric general surgical disease, the student will be able to do the following to the satisfaction of his/her supervisor(s):

- Take a relevant history.
- Perform an acceptable physical exam concentrating on the relevant areas.
- Arrive at an appropriate differential diagnosis.

## Cognitive Knowledge

The student will be expected to demonstrate a fundamental knowledge and understanding of the following general areas and disease processes. The student's knowledge base must be adequate to permit appropriate assessment, investigation, diagnosis, and treatment.

- Common pediatric surgical and urological problems in the emergency department
- The "Acute Abdomen" in children (acute appendicitis, acute gastroenteritis, bowel obstruction, intussusception, malrotation and volvulus etc.)
- Hernias and common surgical problems of inguinal region
- Rectal bleeding in children (fissure-in-ano, juvenile polyp, Meckel's diverticulum, medical conditions that may cause rectal bleeding)
- Common anorectal problems
- The constipated child
- Non-bilious and bilious vomiting in children (pyloric stenosis, gastroesophageal reflux and intestinal obstructions)
- The abdominal mass and solid tumors in childhood (Wilms tumor, neuroblastoma, etc.)
- Common neonatal surgical conditions (neonatal intestinal obstruction, & gastroschisis, necrotizing enterocolitis, imperforate anus, abdominal masses)
- Trauma (general approach to the multiply injured child)
- Prenatal diagnosed disease related to pediatric general and urological conditions
- Common pediatric urological conditions
- Surgical aspects in urinary tract infections in childhood
- Surgical fluid and electrolyte hemostasis
- Congenital anomalies of genito-urinary tract
  
- **Format**  
Students complete 2-week rotation.

<b>Activity</b>	<b>Numbers</b>
Lectures	25
Practice	30
Student Seminars	2
Interactive Case Studies	5
Total	62

**PEDIATRIC SURGERY**  
**PHASE V PROGRAMME**

**1st Week**

**Monday**

9.00-10.00	Grand Round and Practice Çiğdem Ulukaya-Durakbaşa
10.15-11.00	Lecture (Fluid and electrolyte balance in pediatric surgery) Çiğdem Ulukaya-Durakbaşa
11.15-12.00	Lecture (Child and Surgery) Selami Sözübir

13.15-14.00	Lecture (Prenatal Diagnosis in Pediatric Surgery and Urology) Çiğdem Ulukaya-Durakbaşa
14.15-15.00	Lecture (Thoracal and chest wall abnormalities) Mevlit Korkmaz
15.15-16.00	Practice and ward round- Mevlit Korkmaz

**Tuesday**

9.00-10.00	Practice (The Newborn as a Surgical Patient) Meltem Çağlar
10.00-10.15	Lecture (Congenital Diaphragmatic hernia and evantration) Meltem Çağlar
11.15-12.00	Lecture (Head and Neck Masses in childhood) Meltem Çağlar

13.15-14.00	Lecture (Intussusception and differential diagnosis) Meltem Çağlar
14.15-15.00	Lecture (Acute appendicitis and differential diagnosis) Meltem Çağlar
15.15-16.00	Practice and ward round- Meltem Çağlar Practice and ward round- Meltem Çağlar

**Wednesday**

09.00-09.45	Practice and ward round- Hamit Okur
10.00-12.00	Practice Group A – Outpatients clinic –Çiğdem Ulukaya-Durakbaşa / Group B – Operation Room- Meltem Çağlar

13.15-14.00	Lecture (Abdominal Wall Defects and Umbilical Pathologies) Selami Sözübir
14.15-15.00	Lecture (Trauma in children) Selami Sözübir
15.15-16.00	Lecture (GI bleeding in Childhood) Selami Sözübir

**Thursday**

9.00-10.00	Practice (Acute abdomen in children) Hamit Okur
10.15-11.00	Lecture (Inguinal and Scrotal Pathologies in Childhood I) Hamit Okur Lecture (Inguinal and Scrotal Pathologies in Childhood II) Hamit Okur
11.15-12.00	Lecture (Anorectal Malformations) Hamit Okur

13.15-14.00	Interactive Case Studies (child with urinary obstruction) Hamit Okur
14.15-15.00	Lecture (Hirschprung Disease and Constipation) Hamit Okur
15.15-16.00	

**Friday**

9.00-10.00	Practice (Pediatric trauma) Çiğdem Ulukaya-Durakbaşa
10.15-11.00	Interactive case studies (Newborn with green vomiting) Çiğdem Ulukaya-Durakbaşa
11.15-12.00	Lecture (Nonbilious vomiting in children) Çiğdem Ulukaya-Durakbaşa

13.15-14.00	Lecture (GI atresias) Mevlit Korkmaz
14.15-15.00	Interactive case studies- Child with abdominal mass Mevlit Korkmaz
15.15-16.00	Practice and ward round- Mevlit Korkmaz

**2nd Week****Monday**

9.00-10.00	Lecture (Solid tumors in childhood) Mevlit Korkmaz
10.15-11.00	Practice (Constipation and encopresis) Murat Mutuş
11.15-12.00	Lecture (Voiding dysfunction and urinary incontinence) Murat Mutuş

13.15-14.00	Lecture (Pediatric Urology 1) Selami Sözübir
14.15-15.00	Lecture (Pediatric Urology 2 ) Selami Sözübir
15.15-16.00	Interactive Case Studies (child with inguinal mass) Selami Sözübir

**Tuesday**

09.00-09.45	Practice and ward round- Meltem Çağlar
10.00-12.00	Practice-Group B – Outpatients clinic- Mevlit Korkmaz / Group A – Operation Room – Hamit Okur

13.15-14.00	Lecture (Biliary atresia) Murat Mutuş
14.15-15.00	Lecture (Esophageal Atresia) Murat Mutuş
15.15-16.00	Practice and ward round -Murat Mutuş

**Wednesday**

9.00-10.00	Grand Round and Practice Selami Sözübir
10.15-11.00	Seminars of students (Group I) Mevlit Korkmaz
11.15-12.00	Seminars of students (Group II) Murat Mutuş
13.15-15.00	Practice -Group A – Outpatients clinic- Çiğdem Ulukaya-Durakbaşa / Group B – Operation Room- Mevlit Korkmaz
15.15-16.00	Practice and ward round- Murat Mutuş

**Thursday**

09.00-10.00	Practice (GI obstruction in children) Hamit Okur
10.15-11.00	Interactive case studies – (Abdominal pain) Murat Mutuş
11.15-12.00	Practice and ward round- Çiğdem Ulukaya-Durakbaşa
13.15-15.00	Practice Group B – Outpatients clinic- Meltem Çağlar / Group A – Operation Room- Murat Mutuş

**Friday**

9.00-10.00	Theoretical Examination
10.00- 11.00	Evaluation of results
11.00-13.00	Practical Examination

# YEDİTEPE UNIVERSITY HOSPITAL & LÜTFİ KIRDAR KARTAL TRAINING AND RESEARCH HOSPITAL NEUROSURGERY (3 WEEKS)

## Medical Student's Neurosurgery Curriculum

1. General introduction to neurosurgery: Ugur Türe M.D. Professor of Neurosurgery, Başar Atalay M.D. Associate Professor of Neurosurgery

Learning objectives

History of Neurosurgery

Clinical presentation, anatomical concepts and making the diagnosis in a neurosurgical patient.

You should:

1.2.1. Evaluate the surgical neuroanatomy of the brain and the Spinal cord

1.2.2. Evaluate the fundamentals of Neuro-Imaging

- A. Recognize spine fractures and dislocations.
- B. Differentiate on computerized images between blood, air, fat, CSF, and bone.
- C. Recognize specific disease entities listed below such as epidural, subdural, intracranial hematoma, subarachnoid hemorrhage, brain tumors, and hydrocephalus.

1.2.3. Evaluate patient's mental status and speech, Examine the cranial nerves, Examine central and peripheral sensory function, Examine motor function, Examine cranial and peripheral reflexes, Examine cerebellar function and gait.

1.2.4. Evaluate Intracranial hypertension

- D. Understand the pathophysiology of elevated intracranial pressure, cerebral perfusion and the influence of blood pressure, blood gases, and fluid and electrolyte balance.
- E. Recognize the clinical manifestations of acute brain herniation including the Cushing reflex, midbrain effects and vital signs.
- F. Understand the impact of focal mass lesions, structural shifts and their consequences.

2. Intracranial Disease Topics: Ugur Türe M.D. Professor of Neurosurgery, Bülent Güçlü M.D. Assistant Professor of Neurosurgery

Learning objectives:

2.1. Diagnosis and Management of Head Trauma

You should:

- 2.1.1. Understand and assign the Glasgow Coma Score.
- 2.1.2. Recognize the presentation of brain herniation syndromes in the setting of trauma.
- 2.1.3. Initiate management of elevated intracranial pressure in head trauma.
- 2.1.4. Recognize and initiate management of concussion, brain contusion and diffuse axonal injury.
- 2.1.5. Recognize and initiate management of acute subdural and epidural hematoma, including surgical indications.
- 2.1.6. Recognize and initiate management of penetrating trauma including gunshot wounds.
- 2.1.7. Recognize and understand the principles of management of open, closed and basilar skull fractures, including cerebrospinal fluid leak, and chronic subdural hematoma (in children and adults).

Learning objectives:

## 2.2. Diagnosis and Management of Brain Tumor

You should:

- 2.2.1. Know the relative incidence and location of the major types of primary and secondary brain tumors.
- 2.2.2. Understand the general clinical manifestations (focal deficit and irritations, mass effect; supratentorial vs. infratentorial) of brain tumors.
- 2.2.3. Recognize specific syndromes: extra-axial (cerebellopontine, pituitary, frontal....) and intra-axial, in brain tumor presentation.
- 2.2.4. Review the diagnostic tools that are currently used for evaluation (laboratory tests, radiology, biopsy).
- 2.2.5. Understand broad treatment strategies (surgery, radiosurgery, radiation, and chemotherapy) in the treatment of tumors.

Learning objectives

## 2.3. Diagnosis and Management of Cerebrovascular Disease

You should:

- 2.3.1. Recognize the symptoms and signs of anterior and posterior circulation ischemia emphasizing carotid disease and contrasting it with hemorrhagic stroke.
- 2.3.2. Differentiate among the types of ischemic stroke: embolic, hemodynamic, lacunar.
- 2.3.3. Categorize etiologic factors of brain ischemia including atherosclerosis, cardiac disease, arterial dissection, fibromuscular dysplasia, vasculitis, venous thrombosis and hematologic disease.
- 2.3.4. Understand the treatment options in ischemic disease and their indications, including medical management, risk factor modification and surgical therapy.
- 2.3.5. Diagnose and monitor carotid occlusive disease using noninvasive methods and understand indications for angiography and carotid endarterectomy.
- 2.3.6. Know the major causes of intracranial hemorrhage: vasculopathy in the aged (hypertension and amyloidosis), aneurysm, vascular malformation, tumor and coagulopathy.
- 2.3.7. Recognize the symptoms and signs of subarachnoid, cerebral and cerebellar hemorrhage.
- 2.3.8. Apply diagnostic tools in evaluation of acute headache (CT and MRI, role of lumbar puncture).
- 2.3.9. Understand the natural history and broad treatment strategies (surgery, radiosurgery, interventional radiology as well as treatment of vasospasm) of intracranial aneurysms and vascular malformations.

## 3. Spinal disease: Başar Atalay M.D. Associate Professor of Neurosurgery

Learning objectives

### 3.1. Diagnosis and Management of Spinal Trauma and Spinal Cord Injury

You should:

- 3.1.1. The emergency room diagnosis and interpretation of radiologic studies in spinal trauma.
- 3.1.2. Initiate acute management of spinal cord injury including immobilization, steroids and systemic measures.
- 3.1.3. Understand the definition and subsequent management principles of the unstable spine.
- 3.1.4. Understand management principles in spinal cord injury including indications for decompressive surgery and treatment of the medical complications associated with cord injury (skin, bladder, bowel movement, respiratory).

Learning objectives:

### 3.2. Diagnosis and Management of Nontraumatic Neck and Back Problems and Degenerative Spinal diseases

You should:

- 3.2.1. Diagnose and understand the natural history and management principles of whiplash and soft tissue injury.
  - 3.2.2. Recognize the broad categories of spinal pain and radiculopathy:
  - 3.2.3. The signs and symptoms (including cauda equina syndrome).
  - 3.2.4. Their common causes, their diagnosis and their management (cervical and lumbar disc herniation, osteoarthritic disease, spondylolisthesis).
  - 3.2.5. Their differential diagnosis and management (including metastatic disease and primary spinal tumors).
  - 3.2.6. Recognize the broad categories of myelopathy:
  - 3.2.7. The signs and symptoms (including comparison of acute and chronic spinal cord injury).
  - 3.2.8. The common causes, their diagnosis and their management (cervical and lumbar disc herniation and osteoarthritic disease).
  - 3.2.9. Differential diagnosis and management (including transverse myelopathy, metastatic disease and primary spinal tumors).
4. Peripheral nerve disease: Başar Atalay M.D. Associate Professor of Neurosurgery

Learning objectives:

#### 4.1. Diagnosis and Management of Peripheral Nerve Injury and Entrapment

You should:

- 4.1.1. Diagnose traumatic nerve injury (laceration, stretch and compression) and understand indications and general strategies of treatment.
- 4.1.2. Recognize the signs and symptoms of common nerve entrapment (carpal tunnel syndrome, ulnar nerve entrapment, thoracic outlet syndrome and meralgia paresthetica), their etiology, conservative management strategies and indications for surgical intervention.

#### 5. Pediatric neurosurgical problems: Başar Atalay M.D. Associate Professor of Neurosurgery, Bülent Güçlü M.D. Assistant Professor of Neurosurgery

Learning objectives:

#### 4.2. Diagnosis and Management of Hydrocephalus and Spinal Dysraphism

You should:

- 4.2.1. Recognize the symptoms and signs of hydrocephalus in children and adults
- 4.2.2. Understand common etiologies of hydrocephalus in children and adults, and differentiate between communicating and obstructive hydrocephalus.
- 4.2.3. Understand treatment strategies for hydrocephalus.
- 4.2.4. Recognize common syndromes of spinal dysraphism, their neurologic manifestations and broad principles of management.
- 4.2.5. Recognise Craniosynostosis diagnosis and management

#### 4.3. Other pediatric neurosurgical problems

#### 6. Functional Neurosurgery: Bülent Güçlü M.D. Assistant Professor of Neurosurgery

Learning objectives:

#### a. Diagnosis and Management of Surgically Treatable Pain Problems, Movement Disorders and Epilepsy

You should:

- i. Recognize the features of trigeminal and glossopharyngeal neuralgia, causalgia and cancer pain, indications for surgical referral and the spectrum of surgical therapeutic options.
- ii. Recognize movement disorders amenable to surgical intervention, including Parkinson's disease, dystonia, spasticity, and hemifacial spasm, indications for surgical referral and the spectrum of surgical therapeutic options.
- iii. Understand the general classification of seizure disorders, definition of intractable epilepsy, and the broad categories of surgical intervention for epilepsy including invasive electrodes, resective and disconnective surgery.

7. Common infections in neurosurgery: Başar Atalay M.D. Associate Professor of Neurosurgery

Learning objectives:

a. Diagnosis and Management of infections in neurosurgery

You should:

- i. Learn diagnosis and management of meningitis, cerebritis and other similar infections
- ii. Learn surgical antisepsis, disinfection and sterilization
- iii. Recognize the clinical manifestations of abscess and focal infections due to local spread, hematogenous disease associated with immune deficiency, and how they differ from the mimic tumors.
- iv. Understand the general principles in the treatment of abscess and focal intracranial infections.
- v. Recognise the diagnosis and management of Spinal infections like Tuberculosis osteomyelitis, Brucella spondylodiscitis, postoperative discitis and wound infections
- vi. Recognise the diagnosis and management of shunt infections and dysfunction



**1st Week Yeditepe University Hospital****Monday**

8.00-9.00	Grand Raund
9.30-12.00	Lecture
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Practice(Outpatient clinic)

**Tuesday**

8.00-9.00	Grand Raund
9.30-13.00	Operating Room
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Practice(Outpatient clinic)

**Wednesday**

9.00-10.00	Grand Raund
10.30-12.00	Lecture
13.30-15.30	Hospital Conferences
15.30-17.30	Seminar

**Thursday**

8.00-9.00	Grand Raund
9.30-13.00	Operating Room
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Friday**

9.00-10.00	Student Seminar and Journal club
10.30-12.00	Lecture
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Saturday**

10.30-12.00	Neurosurgery,Pathology and Radiology joint meeting
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**2nd Week      Yeditepe University Hospital****Monday**

8.00-9.00	Grand Raund
9.30-12.00	Lecture
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Tuesday**

8.00-9.00	Grand Raund
9.30-13.00	Operating Room
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Wednesday**

9.00-10.00	Grand Raund
10.30-12.00	Lecture
13.30-15.30	Hospital Conferences
15.30-17.30	Seminar

**Thursday**

8.00-9.00	Grand Raund
9.30-13.00	Operating Room
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Friday**

9.00-10.00	Student Seminar and Journal club
10.30-12.00	Lecture
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Saturday**

10.30-12.00	Neurosurgery,Pathology and Radiology joint meeting
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**3rd Week**      **Lütfi Kırdar Kartal Training and Research Hospital , 2. Neurosurgery Clinic**  
**Tufan Hiçdönmez, Assoc. Professor of Neurosurgery**

**Monday**

8.00-9.00	Grand Raund
9.30-12.00	Lecture
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Tuesday**

8.00-9.00	Grand Raund
9.30-13.00	Operating Room
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Wednesday**

9.00-10.00	Grand Raund
10.30-12.00	Lecture
13.30-15.30	Hospital Conferences
15.30-17.30	Seminar

**Thursday**

8.00-9.00	Grand Raund
9.30-13.00	Operating Room
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**Friday**

9.00-10.00	Student Seminar and Journal club
10.30-12.00	Lecture
13.30-15.30	Practice(Neurosurgical ward)
15.30-17.30	Seminar

**YEDITEPE UNIVERSITY HOSPITAL**  
**ORTHOPAEDICS AND TRAUMATOLOGY ( 3 WEEKS )**

Faik Altıntaş, M.D. Prof  
Tahsin Beyzadeođlu M.D Assoc. Prof  
Çađatay Uluçay M.D. Assist. Prof  
Erkan Servet M.D  
Korcan Yüksel M.D  
Onur Kocadal M.D  
Ayberk Önal M.D

**Learning objectives**

- . Able to approach to a major orthopaedic trauma patient
- . Able to interpret the skeletal plain radiograms and joint MRI
- . Learn how to do physical examination of the musculoskeletal system
- . Able to perform simple casting and bandages for fractures and distortions
- . Know how to examine a new born child for PEV, congenital anomalies and developmental dysplasia of the hip
- . Learn the differential diagnosis of benign and malignant bone tumors
- . Learn how to diagnose and treatment of common orthopedic diseases such as arthritis , sports injuries and low back pain
- . Learn the causes of common orthopaedic diseases such as osteoarthritis and low back pain
- . Able to interpret for congenital orthopedic anomalies
- . Able to differentiate cerebral palsy from other cerebral and metabolic diseases
- . Learn the joint kinematics and cartilage biology
- . Able to interpret traumatic joint dislocations and outcomes
- . Learn orthopedic infections and emergent protocols of treatment
- . Learn how to act in operating room and scrubbing
- . Able to interpret foot pain, flat foot, in toeing and foot and ankle problems
- . Learn how to approach for an amputation and how to prepare the amputate
- . Learn how to approach microsurgery
- . Learn the emergent approach and treatment of a spinal trauma w/wo neurological deficit
- . Learn how to present a patient with orthopedic diseases
- . Perform a presentation of a orthopedic issue

## Orthopaedics and Traumatology Phase V

### 1. Week

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
8:00-9:00	<b>Dr F Altıntaş</b> Intraducing to Orthopaedics	Student presentation Operation / Policlinics Preop-x ray round	Student presentation / Policlinics Operation Preop-x ray round	Student presentation / Policlinics Operation Preop-x ray round	Student presentation Operation / Policlinics Preop-x ray round
9:00-12:00	Operation / Policlinics	Operation / Policlinics	Operation / Policlinics	Operation / Policlinics	Operation / Policlinics
12:00-13:00	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>
14:00-16:00	<b>Dr Ç. Uluçay</b> Fractures of Children Treatments Perthes Disease and Avascular Bone Necrosis	<b>Dr T Beyzadeoğlu</b> Pelvis and Acetabular Fractures Open Fractures Wound Treatment	<b>Dr T Beyzadeoğlu</b> Dislocations and Fractures of the Lower Extremity	<b>Dr Ç. Uluçay</b> Trauma Spinal	<b>Dr F Altıntaş</b> basic principles Fracture and Fracture Healing Osteomyelitis Septic Arthritis
16:00-17:00	Pediatric Examination	Examination of Knee	Examination of Upper Extremity	Examination of Spine	Examination of Hip

### 2. Week

8:00-9:00	Student presentation / Policlinics Operation Preop-x ray round	Student presentation Operation / Policlinics Preop-x ray round	Student presentation / Policlinics Operation Preop-x ray round	Student presentation / Policlinics Operation Preop-x ray round	Student presentation Operation / Policlinics Preop-x ray round
9:00-12:00	Operation / Policlinics	Operation / Policlinics	Operation / Policlinics	Operation / Policlinics	Operation / Policlinics
12:00-13:00	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>
14:00-16:00	<b>Dr Ç. Uluçay</b> Methabolic Bone Diseases Developmental Dysplasia of the hip	<b>Dr T Beyzadeoğlu</b> Shoulder and Elbow Problems	<b>Dr T Beyzadeoğlu</b> Microvascular surgery and replantations	<b>Dr Ç. Uluçay</b> Scoliosis Kyphosis Degenerative and Inflammatory Diseases of the Spine	<b>Dr F Altıntaş</b> Cerebral Palsy Osteoarthritis Arthroplasty
16:00-17:00	Gait evaluation	The follow-up after microsurgery	Management after sports injury	Evaluation of the x-ray in lower extremity fracture	Examination of Cerebral palsy

### 3. Week

8:00-9:00	Student presentation / Polyclinics Operation Preop-x ray round	Student presentation Operation / Polyclinics Preop-x ray round	Student presentation / Polyclinics Operation Preop-x ray round	Student presentation Polyclinics Operation / Preop-x ray round	Student presentation Operation / Polyclinics Preop-x ray round
9:00-12:00	Operation / Polyclinics	Operation / Polyclinics	Operation / Polyclinics	Operation / Polyclinics	<b>Written Examination</b>
12:00-13:00	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>	<b>LUNCH BREAK</b>
14:00-16:00	<b>Dr Ç. Uluçay</b> PEV and lower extremity congenital anomalies	<b>Dr T Beyzadeoğlu</b> Benign and Malign Bone Tumors Sports Injuries	<b>Dr T Beyzadeoğlu</b> Upper extremity congenital anomalies Upper extremity fractures	<b>Dr Ç. Uluçay</b> Disorders of the Foot and Ankle	<b>Oral Examination</b>
16:00-17:00	Evaluation of x-ray in pediatric orthopaedics	Evaluation of x-ray in tumors	Wound Management	Cast application	



**YEDITEPE UNIVERSITY FACULTY OF MEDICINE**  
**&**  
**İSTANBUL GÖZTEPE TRAINING AND RESEARCH HOSPITAL**  
**NEUROLOGY (3 Weeks)**

**Approach to Neurological Patient I-II**

*Learning Objectives*

You should be able to

- Symptoms and signs of neurological ill patient
- How to approach diagnosis
- Make differential diagnosis

**Pyramidal, extrapyramidal, cerebellar systems**

*Learning Objectives*

You should be able to

- Important anatomical pathways and connections of these systems

**Cerebral lobes**

*Learning Objectives*

You should be able to

- Anatomy of brain and cerebellum

**Coma**

*Learning Objectives*

You should be able to

- Approach to comatose patient in emergency room
- Apply the first line examination
- Make the differential diagnosis
- Learn the ethiology and the treatment of coma

**Headaches**

*Learning Objectives*

You should be able to

- Clinical features of headache syndromes
- Make the differential diagnosis



- Classify headache syndromes
- Treatment of headache

## **Myasthenia Gravis and the other neuromuscular junction disorders**

### *Learning Objectives*

You should be able to

- Learn how to diagnose Myasthenia Gravis and the other neuromuscular junction disorders
- How to diagnose Neuromuscular emergencies
- Learn etiology
- Treatment of NM emergencies
- Neonatal and congenital myasthenic syndromes

## **Muscle diseases**

### *Learning Objectives*

You should be able to

- Classification of muscle diseases
- Inherited and acquired muscle disease
- Treatment of muscle diseases
- Emergency of these disorders

## **Motor neuron diseases**

### *Learning Objectives*

You should be able to

- Classification of diseases that involve motor neurons
- As a prototype ALS
- Prognosis and treatment strategy of ALS

## **Polyneuropathies**

### *Learning Objectives*

You should be able to

- Know how to approach to patient with polyneuropathy
- Classification of polyneuropathies
- Make differential diagnosis
- Treatment of polyneuropathies

## **Examination of eye movements**

### *Learning Objectives*

You should be able to

- Learn anatomy and function of ocular motor nerves
- Understand the causes and differential diagnosis

## **Neurological examination**

### *Learning Objectives*

You should be able to

- Examination of motor, extrapyramidal, cerebellar systems
- Examination of reflexes
- Examination mental status

## **Headache**

### *Learning Objectives*

You should be able to

- Differential diagnosis of primary and secondary headaches
- Treatment of headaches
- Headache in emergency room

## **Emergency states in neurology**

### *Learning Objectives*

You should be able to

- Approach to emergency states of neurologic disorders
- Learn the differential diagnosis of emergent status
- Treatment of emergency states of neurologic disorders

## **Speech disorders**

### *Learning Objectives*

You should be able to

- Know how to approach cortical and subcortical aphasias
- Understand lesion localisation
- Make the differential diagnosis

## **Fundoscopy examination and clinical utilisation**

### *Learning Objectives*

You should be able to

- Evaluation of fundus
- Causes of optic neuritis
- Approach to intracranial hypertension

## **Neuroradiology**

### *Learning Objectives*

You should be able to

- Basic principles of CT and MRI
- Angiography and clinical utility

## **Neuromuscular disease**

### *Learning Objectives*

You should be able to

- Learn physiology of the peripheral nerves, neuromuscular junction and muscles
- Approach to polyneuropathy
- Approach to myopathy and neuromuscular junction diseases

## **Lumbar puncture and clinical utility**

### *Learning Objectives*

You should be able to

- Learn physiology of cerebrospinal fluid
- How to do lumbar puncture
- Clinical use of lumbar puncture in neurological disease

## **Examination of motor and sensorial pathways**

### *Learning objectives*

You should be able to

- Know how to examine motor and sensorial pathways of a patient with neurological disease.

## **Examination of cranial nerves**

### *Learning objectives*

You should be able to

- Examine cranial nerves
- Know the anatomy and the diseases of the cranial nerves
- Know how to approach patient with a cranial nerve disorder

## **Approach to extrapyramidal disorders**

### *Learning objectives*

You should be able to

- Know how to diagnose extrapyramidal disorders.
- Learn the clinical features and differential diagnosis of extrapyramidal disorders

## **Mental diseases**

### *Learning objectives*

You should be able to

- Know how to approach a patient with a mental disease
- Make the differential diagnosis
- Learn the clinical features, etiology and treatment of mental diseases

## **Cerebrovascular Diseases**

### *Learning objectives*

You should be able to

- Know how to diagnose cerebrovascular diseases ,
- Make classification of cerebrovascular diseases
- Learn the etiology and the treatment of cerebrovascular diseases

## **Examination of an aphasic patient**

### *Learning objectives*

You should be able to

- Know how to approach an aphasic patient,
- Make classification
- Learn the anatomical pathways of aphasia

## **Acute confusional state**

### *Learning objectives*

You should be able to

- Know how to approach a patient with acute confusional state,
- Make differential diagnosis
- Learn the etiology and the treatment of acute confusional states

## **Multiple sclerosis**

### *Learning objectives*

You should be able to

- Know the clinical features of multiple sclerosis,
- Make the differential diagnosis
- Learn the ethiology,
- Treat the patient with an acute attack
- Learn long term treatment principles.
- 

## **Approach to a patient with behavior disorders**

### *Learning objectives*

You should be able to

- Know how to examine a patient with behavior disorder
- Make differential diagnosis
- Treat a patient with behavioral disorders

## **Parkinson's disease**

### *Learning objectives*

You should be able to

- Know the clinical features of Parkinson's disease
- Make differential diagnosis
- Learn the ethiology
- Treat a patient with Parkinson's Disease.

## **Epilepsy**

### *Learning objectives*

You should be able to

- Know the clinical features of epilepsy
- Make the differential diagnosis,
- Classify epilepsy
- Learn etiology
- Treat a patient with epilepsy

## **Status Epilepticus.**

### *Learning objectives*

You should be able to

- Know how to examine a patient with status epilepticus
- Know clinical features of status epilepticus
- Make the differential diagnosis
- Classify
- Learn etiology,
- Treat the patient with status epilepticus

## **Approach to paraplegic patient**

### *Learning objectives*

You should be able to

- Know how to examine a patient with paraplegia
- Know the clinical features of paraplegia
- Make the differential diagnosis
- Learn the classification and etiology

## **CNS infections**

### *Learning objectives*

You should be able to

- Know how to examine a patient with CNS infection
- Know the clinical features of CNS infections
- Make the differential diagnosis
- Learn the etiology

## **Treatment of paraplegia**

### *Learning objectives*

You should be able to

- Know how to treat a paraplegic patient

## **Dementia**

### *Learning objectives*

You should be able to

- Know how to examine a patient with dementia
- Know the clinical features
- Make differential diagnosis
- Learn etiology
- Treat patients with dementia

## Case presentation

### *Learning objectives*

You should be able to

- Approach different neurological patients
- Examine patients and make differential diagnosis

### **Lectures:**

- 1- Neurological examination
- 2- Coma
- 3- Headache
- 4- Encephalopathies
- 5- Cerebrovascular diseases
- 6- Parkinson and Extrapyrmidal system disorders
- 7- Multiple Sclerosis and demyelinating disorders
- 8- Epilepsy
- 9- CNS infections
- 10- Myasthenia Gravis ve Neuromuscular junction disorders
- 11- Muscle diseases
- 12- ALS and motor neuron diseases
- 13- Polyneuropathies
- 14- Dementia
- 15- Sleep disorders
- 16- Spinal Cord Diseases

### **Seminars:**

1. Approach to neurological ill patient
2. Examination of eye movements
3. Neurological examination
4. Pyramidal, extrapyramidal, cerebellar systems
5. Cerebral lobes
6. Cranial nerves
7. Emergency states in neurology
8. Speech disorders
9. Fundoscopic examination and clinical utilisation
10. Neuroradiology
11. Lumbar puncture and clinical utility
12. Examination of motor and sensory pathways
13. Mental disease
14. Examination of an aphasic patient
15. Approach to a patient with behavioral disorders
16. Status epilepticus
17. Approach to paraplegic patient

Case presentation	x	4 hrs
Grand round	x	12 hrs
Outpatient clinics	x	20 hrs
Pratic	x	20 hrs
Emergency	x	1 night/ per person

**Monday 1.**

08.00-09.20	Grand Round	
09.20-10.20	Grand Round	
10.30-11.20	Grand Round	
11.30-12.20	Grand Round	
13.30-14.20	Lecture Movement Disorders	MD..Fatma Candan
14.30-15.20	Lecture Movement Disorders	MDFatma Candan
15.30-16.20	Bed Side Teaching	MDFatma Candan
16.30-17.20	Bed Side Teaching	MDFatma Candan

**Tuesday**

08.00-09.20	Grand Round	
09.20-10.20	Grand Round	
10.30-11.20	Lecture Neurologic Examination	MD.Nihal Işık
11.30-12.20	Lecture Neurologic Examination	MD.Nihal Işık
13.30-14.20	Case presentation	MD.Fatma Candan
14.30-15.20	Case presentation	MD.Fatma Candan
15.30-16.20	Case presentation	MD.Fatma Candan
16.30-17.20	Case presentation	MD.Fatma Candan

**Wednesday**

08.00-09.20	Lecture Coma	MD.Nihal Işık
09.20-10.20	Grand Round	
10.30-11.20	Grand Round	
11.30-12.20	Grand Round	
13.30-14.20	Bed Side Teaching	MD.Nihal Işık
14.30-15.20	Bed Side Teaching	MD.Nihal Işık
15.30-16.20	Bed Side Teaching	MD.Nihal Işık
16.30-17.20	Bed Side Teaching	MD.Nihal Işık

**Thursday**

08.00-09.20	Grand Round	
09.20-10.20	Grand Round	
10.30-11.20	Lecture Multiple sclerosis	MD.Nihal Işık
11.30-12.20	Lecture Multiple sclerosis	MD.Nihal Işık
13.30-14.20	Case presentation	MD.Nihal Işık
14.30-15.20	Case presentation	MD.Nihal Işık
15.30-16.20	Case presentation	MD.Nihal Işık
16.30-17.20	Case presentation	MD.Nihal Işık

**Friday**

08.00-09.20	Grand Round	
09.20-10.20	Grand Round	
10.30-11.20	Grand Round	
11.30-12.20	Grand Round	
13.30-17.20	Literatüre	



**Monday 2.**

08.00-09.20	Grand Round		
09.20-10.20	Lecture	Headache	MD.Burcu Uğurel
10.30-11.20	Lecture	Headache	MD.Burcu Uğurel
11.30-12.20	Lecture Uğurel	Cerebro -Vascular Diseases	MD.Burcu
13.30-14.20	Lecture Uğurel	Cerebro -Vascular Diseases	MD.Burcu
14.30-15.20	Out patient Clinic		
15.30-16.20	Out patient Clinic		
16.30-17.20	Case presentation		MD.Burcu Uğurel

**Tuesday**

08.00-09.20	Grand Round		
09.20-10.20	Lecture	Infections of nervous systems	MD.Burcu Uğurel
10.30-11.20	Lecture	Infections of nervous systems	MD.Burcu Uğurel
11.30-12.20	Lecture	Motor neuron Disorders	MD.Burcu Uğurel
13.30-14.20	Lecture	Motor neuron Disorders	MD.Burcu Uğurel
14.30-15.20	Lecture	Sleep Disorders	MD.Burcu Uğurel
15.30-16.20	Lecture	Sleep Disorders	MD.Burcu Uğurel
16.30-17.20	Case presentation		MD.Burcu Uğurel

**Wednesday**

08.00-09.20	Grand Round		
09.20-10.20	Lecture Bingöl	Epilepsy	MD. Canan Aykut
10.30-11.20	Lecture Bingöl	Epilepsy	MD. Canan Aykut
11.30-12.20	Lecture Bingöl	Epilepsy	MD.Canan Aykut
13.30-14.20	Lecture	NMJ Diseases	MD.Berrin Aktekin
14.30-15.20	Lecture	NMJ Diseases	MD.Berrin Aktekin
15.30-16.20	Lecture	Spinal Cord Diseases	MD.Berrin Aktekin
16.30-17.20	Lecture	Spinal Cord Diseases	MD.Berrin Aktekin

**Thursday**

08.00-09.20	Grand Round		
09.20-10.20	Lecture Aktekin	Encephalopathies	MD.Berrin
10.30-11.20	Lecture Aktekin	Encephalopathies	MD.Berrin
11.30-12.20	Lecture Aktekin	Muscle Diseases	MD.Berrin
13.30-14.20	Lecture Aktekin	Muscle Diseases	MD.Berrin
14.30-15.20	Lecture Aktekin	Disorders of peripheral Nerves	MD.Berrin
15.30-16.20	Lecture Aktekin	Disorders of peripheral Nerves	MD.Berrin
16.30-17.20	Case presentation		MD.Berrin Aktekin

**Friday**

08.00-09.20	Grand Round		
09.20-10.20	Lecture Aktekin	Muscle Diseases	MD.Berrin

10.30-11.20	Lecture	Dementia	MD.Burcu Uğurel
11.30-12.20	Lecture	Dementia	MD.Burcu Uğurel
13.30-17.20	Case presentation		MD.Berrin Aktekin

**Monday 3.**

08.00-09.20	Grand Round		
09.20-10.20	Grand Round		
10.30-12.00	Grand Round		
13.30-14.20	Bed Side Teaching		MD.Nihal Işık
14.30-1700	Bed Side Teaching		MD.Nihal Işık

**Tuesday**

08.30-09.20	Grand Round		
09.30-10.20	Grand Round		
10.30-12.00	Grand Round		
13.30-14.20	Bed Side Teaching		MD.Fatma Candan
14.30-1700	Bed Side Teaching		MD.Fatma Candan

**Wednesday**

08.30-09.20	Grand Round		
09.30-10.20	Grand Round		
10.30-12.00	Out patient Clinic		
13.30-14.20	Out patient Clinic		
14.30-1700	Out patient Clinic		

**Thursday**

08.30-09.20	Grand Round		
09.30-10.20	Grand Round		
10.30-12.00	Grand Round		
13.30-14.20	Out patient Clinic		
14.30-1700	Out patient Clinic		

**Friday**

09.00-14.30	Exam		

**YEDİTEPE UNIVERSITY FACULTY OF MEDICINE**  
**UROLOGY**  
**(3 weeks)**

In this internship program, the target population is fifth class students of medical faculty. Our first principle is to educate these students as self-confident and free minded people. Also our aim is educating students to gain the knowledge and ability on the diagnosis and the treatment of the urological disorders as researcher and productive scientists. At the same time students are educated to have the knowledge for directing the patient to an urologist if needed.

Our mission is to bring up doctors to the world with the highest level actual knowledge on urology and the uppermost clinical urological ability.

In this context;

1. Improvement of theoretical lessons with practical studies.  
Physical and radiological examination of the patient with urological disorder
2. Evaluation of the treatment principles on urological emergencies and simple urological approaches (i.e. urethral catheterization )
3. Evaluation of actual developments in urology.
4. Accommodation of students to lessons with active participation and bringing up the experiences of researching and presenting a subject.
5. Introduction of basic urological principles in endoscopic and open surgeries
6. Introduction of the department of urology to the students who are interested in urology.

**Methods :**

1) Theoretical lessons

2) Interactive lessons

- Active education in urology polyclinic (anamnesis, physical examination, evaluation of the patient, discussion of the patient with prelectors)
- Education in the inpatient service.
- Education in the operating room (Practising the basic medical instrumentation, practising surgery or assistance when the prelectors deem suitable)
- Interactive video-urology

## **EDUCATION AND STUDY PLAN:**

### **Basic Principles :**

Trainees will be divided to subgroups according to the total number. The subgroups will practice ESWL, urodinamy, evaluating the patient in the urology polyclinic and approaches in the operating room according to a program.

Every subgroup will work with a prelector in this internship and will have patient evaluations with him. Trainees will be involved in all the clinical studies of the prelector. Trainees will follow-up the patients

### **Practical Exercises:**

Trainees are responsible to follow up the patients for medical history, physical and laboratory examination and treatment plan. Trainee subgroups will be ready in the operating rooms at the operating days of the prelector who they work with , and assist the suitable operations actively. Trainees will be involved in the basic urological approaches (i.e. urethral cathater placement, suturing, medical dressing. Other then this , they will help the assistant in the polyclinic or inpatient service.

### **Clinical Practice :**

Every subgroup will be with prelector , in the medical examination , diagnosis , and treatment stages. The introduction of the diagnosis and treatment equipments will be done by prelector (urodinamy , uroflowmetry, ESWL, transrectal ultrasonographic prostat biopsy).

**At the end of the internship, trainees should have the knowledge and ability of the diagnosis and treatment about the following subjects.**

- Diagnosis and the treatment of the renal colic.
- Evaluation of hematuria
- Diagnosis of the urinary retention and obstruction.
- Urinary system stone disorder and first-stage treatment
- Signs,symptoms and diagnosis of the urological cancers
- The role of physicians in urological emergencies
- Diagnosis of the erectil dysfunction
- Diagnosis and the treatment of nocturnal enuresis.
- The primarily approach in the pediatric urology.
- Diagnosis and treatment in the sexually-transmitted diseases.

- PSA and BPH
- Diagnosis and treatment of the urinary infections.

**At the end of the internship , the trainees should have the enough practical and surgical abilities about the following subjects.**

- Physical examination
- Vaginal inspection
- Digital rectal examination
- Examination of the scrotum and the testis
- Urethral Catheterization.

**1. Day**

09.00-09.45	LESSON	Anatomy of the Genitourinary Tract	Kemal Sarıca
10.00-10.45	LESSON	Symptoms of the Disorders of the Genitourinary Tract	Kemal Sarıca
11.00-11.45	LESSON	Urological Laboratory Examination	Kemal Sarıca

**2. Day**

09.00-09.45	LESSON	Radiology of the Genitourinary Tract	Faruk Yencilek
10.00-10.45	LESSON	Instrumentation and Endoscopic Studies	Faruk Yencilek
11.00-11.45	LESSON	Urologic Diseases Which Need Early Diagnosis	Faruk Yencilek

**3. Day**

09.00-09.45	LESSON	Urological Emergencies	Faruk Yencilek
10.00-10.45	LESSON	Benign Prostatic Hyperplasia	Hakan Koyuncu
11.00-11.45	LESSON	Benign Prostatic Hyperplasia	Hakan Koyuncu

**4. Day**

09.00-09.45	LESSON	Prostatic Diseases-Prostatitis	Hakan Koyuncu
10.00-10.45	LESSON	Nonspecific Infections of the Genitourinary Tract	Hakan Koyuncu
11.00-11.45	LESSON	Specific Infections of the Genitourinary Tract	Hakan Koyuncu

**5. Day**

09.00-09.45	LESSON	Vesicoureteral Reflux	Kemal Sarıca
10.00-10.45	LESSON	Prostate Cancer	Faruk Yencilek
11.00-11.45	LESSON	Prostate Cancer	Faruk Yencilek

**6. Day**

09.00-09.45	LESSON	Renal Neoplasms	Faruk Yencilek
10.00-10.45	LESSON	Renal Neoplasms	Faruk Yencilek
11.00-11.45	LESSON	Congenital Diseases of Kidney	Kemal Sarıca
13.00-13.45	PRACTISE	Medical History and Physical Examination	Kemal Sarıca
14.00-14.45	PRACTISE	Medical History and Physical Examination	Kemal Sarıca
15.00-15.45	PRACTISE	Laboratory	Kemal Sarıca

**7. Day**

09.00-09.45	LESSON	Voiding Physiology	Hakan Koyuncu
10.00-10.45	LESSON	Urodynamic Studies	Hakan Koyuncu
11.00-11.45	LESSON	Male Sexual Dysfunctions	Hakan Koyuncu
13.00-13.45	PRACTISE	Urodynamic Studies	Hakan Koyuncu
14.00-14.45	PRACTISE	Urodynamic Studies	Hakan Koyuncu
15.00-15.45	PRACTISE	Polyclinic	Hakan Koyuncu

**8. Day**

09.00-09.45	LESSON	Sexually Transmitted Diseases	Hakan Koyuncu
10.00-10.45	LESSON	Male Infertility	Hakan Koyuncu
11.00-11.45	LESSON	Male Infertility	Hakan Koyuncu
13.00-13.45	PRACTISE	Uroradiology	Kemal Sarıca
14.00-14.45	PRACTISE	Uroradiology	Kemal Sarıca
15.00-15.45	PRACTISE	Uroradiology	Kemal Sarıca

**9. Day**

09.00-09.45	LESSON	Urinary Stone Disease	Kemal Sarıca
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10.00-10.45	LESSON	Urinary Stone Disease	Kemal Sarıca
11.00-11.45	LESSON	Urinary Obstruction&Stasis	Kemal Sarıca
13.00-13.45	PRACTISE	Polyclinic	Kemal Sarıca
14.00-14.45	PRACTISE	Polyclinic	Kemal Sarıca
15.00-15.45	PRACTISE	Polyclinic	Kemal Sarıca

#### 10. Day

09.00-09.45	LESSON	Incontinence	Hakan Koyuncu
10.00-10.45	LESSON	Urinary Obstruction	Kemal Sarıca
11.00-11.45	LESSON	Scrotal and Related Diseases	Kemal Sarıca
13.00-13.45	PRACTISE	Operating Room	Kemal Sarıca
14.00-14.45	PRACTISE	Operating Room	Kemal Sarıca
15.00-15.45	PRACTISE	Operating Room	Kemal Sarıca
15.00-15.45	PRACTISE	Operating Room	Kemal Sarıca

#### 11. Day

09.00-09.45	LESSON	Urogenital Trauma	Kemal Sarıca
10.00-10.45	LESSON	Diseases of the Urethra	Kemal Sarıca
11.00-11.45	LESSON	Neuropathic Bladder Disorders	Faruk Yencilek

#### 12. Day

09.00-09.45	LESSON	Urologic Problems in Pregnancy	Kemal Sarıca
10.00-10.45	LESSON	Disorders of Adrenal Glands	Faruk Yencilek
11.00-11.45	LESSON	Invasive Uroradiology	Faruk Yencilek

#### 13. Day

09.00-09.45	LESSON	Tumors of Testis	Faruk Yencilek
10.00-10.45	LESSON	Tumors of Testis	Faruk Yencilek
11.00-11.45	LESSON	Diseases of Penis	Hakan Koyuncu
13.00-13.45	PRACTISE	Cystoscopy	Kemal Sarıca
14.00-14.45	PRACTISE	Cystoscopy	Kemal Sarıca
15.00-15.45	PRACTISE	Uroflowmetry	Hakan Koyuncu

#### 14. Day

09.00-09.45	LESSON	Congenital Diseases of Bladder	Kemal Sarıca
10.00-10.45	LESSON	Urothelial Tumors	Faruk Yencilek
11.00-11.45	LESSON	Urothelial Tumors	Faruk Yencilek
13.00-13.45	PRACTISE	Operating Room	Kemal Sarıca
14.00-14.45	PRACTISE	Operating Room	Kemal Sarıca
15.00-15.45	PRACTISE	Operating Room	Kemal Sarıca

**YEDITEPE UNIVERSITY FACULTY OF MEDICINE**  
**FORENSIC MEDICINE CLERKSHIP PROGRAM**  
**(1,5 weeks)**

Oğuz Polat MD, Pro.  
M.Ercüment Aksoy MD, Prof.

**GROUP I.**

<b>Time</b>	<b>16.05.2011</b>	<b>17.05.2011</b>	<b>18.05.2011</b>	<b>19.05.2011</b>	<b>20.05.2011</b>
09:00-09:45	Forensic System and Physician Polat O. MD.	Forensic Autopsy I. Polat O. MD.	Sexual offences I. Polat O. MD.		The pathophysiology of death Aksoy ME MD.
10:00-10:45	Child rights Polat O. MD.	Forensic Autopsy II. Polat O. MD.	Sexual offences II. Polat O. MD.		Post Mortem Changes Aksoy ME MD.
11:00-11:45	Child abuse and neglect Polat O. MD.	Forensic Autopsy III. Polat O. MD.	Crime scene Investigation Polat O. MD.		Time of death Aksoy ME MD.
13:00-13:45	Elder Abuse Polat O. MD.	Suffocation and asphyxia Polat O. MD.	Forensic Autopsy Practice Polat O. MD.		The establishment of identity of human remains Aksoy ME MD.
14:00-14:45	Legal aspects of child abuse Polat O. MD.	Fatal pressure on the neck Polat O. MD.	Forensic Autopsy Practice Polat O. MD.		Turkish Penalty Code and physician Aksoy ME MD.
15:00-15:45	Forensic psychiatry Polat O. MD.	Human Rights Violations Polat O. MD.	Forensic Autopsy Practice Polat O. MD.		Evaluation of Legal Cases Aksoy ME MD.

<b>Time</b>	<b>23.05.2011</b>	<b>24.05.2011</b>	<b>26.05.2011</b>		
09:00-09:45	The pathology of wounds I. Polat O. MD.	Report Writing I. Aksoy ME MD.	Forensic aspects of alcohol Aksoy ME MD.		
10:00-10:45	The pathology of wounds II. Polat O. MD.	Report Writing II. Aksoy ME MD.	Poisoning with medicines Aksoy ME MD.		
11:00-11:45	Sharp force injuries Polat O. MD.	Electrical injuries Aksoy ME MD.	Narcotic and hallucinogenic drugs Aksoy ME MD.		
13:00-13:45	Blunt force injuries Aksoy ME MD.	Immersion deaths Aksoy ME MD.	The pathology of sudden death Aksoy ME MD.		
14:00-14:45	Gunshot and explosion deaths I. Aksoy ME MD.	Poisoning Aksoy ME MD.	Exam Aksoy ME MD.		
15:00-15:45	Gunshot and explosion deaths II. Aksoy ME MD.	Carbon monoxide poisoning Aksoy ME MD.	Exam Aksoy ME MD.		



**GROUP II.**

<b>Time</b>				<b>26.05.2011</b>	<b>27.05.2011</b>
09:00-09:45				Forensic System and Physician Polat O. MD.	Forensic Autopsy I. Polat O. MD.
10:00-10:45				Child rights Polat O. MD.	Forensic Autopsy II. Polat O. MD.
11:00-11:45				Child abuse and neglect Polat O. MD.	Forensic Autopsy III. Polat O. MD.
13:00-13:45				Elder Abuse Polat O. MD.	Suffocation and asphyxia Polat O. MD.
14:00-14:45				Legal aspects of child abuse Polat O. MD.	Fatal pressure on the neck Polat O. MD.
15:00-15:45				Forensic psychiatry Polat O. MD.	Human Rights Violations Polat O. MD.

<b>Time</b>	<b>30.05.2011</b>	<b>31.05.2011</b>	<b>1.06.2011</b>	<b>2.06.2011</b>	<b>03.06.2011</b>
09:00-09:45	Sexual offences I. Polat O. MD.	The pathophysiology of death Aksoy ME MD.	The pathology of wounds I. Polat O. MD.	Report Writing I. Aksoy ME MD.	Forensic aspects of alcohol Aksoy ME MD.
10:00-10:45	Sexual offences II. Polat O. MD.	Post Mortem Changes Aksoy ME MD.	The pathology of wounds II. Polat O. MD.	Report Writing II. Aksoy ME MD.	Poisoning with medicines Aksoy ME MD.
11:00-11:45	Crime scene Investigation Polat O. MD.	Time of death Aksoy ME MD.	Sharp force injuries Polat O. MD.	Electrical injuries Aksoy ME MD.	Narcotic and hallucinogenic drugs Aksoy ME MD.
13:00-13:45	Forensic Autopsy Practice Polat O. MD.	The establishment of identity of human remains Aksoy ME MD.	Blunt force injuries Aksoy ME MD.	Immersion deaths Aksoy ME MD.	The pathology of sudden death Aksoy ME MD.
14:00-14:45	Forensic Autopsy Practice Polat O. MD.	Turkish Penalty Code and physician Aksoy ME MD.	Gunshot and explosion deaths I. Aksoy ME MD.	Poisoning Aksoy ME MD.	Exam Aksoy ME MD.
15:00-15:45	Forensic Autopsy Practice Polat O. MD.	Evaluation of Legal Cases Aksoy ME MD.	Gunshot and explosion deaths II. Aksoy ME MD.	Carbon monoxide poisoning Aksoy ME MD.	Exam Aksoy ME MD.

**CLINICAL PHARMACOLOGY**  
**RATIONAL PHARMACOTHERAPY – RATIONAL DRUG USE**  
**Prof.Dr. Ece Genç, Prof. Dr. Serdar Alpan, Prof. Dr.Zafer Gören**  
**(1,5 week)**

DAY	TOPIC
<b>MONDAY</b>	
9:00 - 9:45	Introduction to the program, OSCE Examination and its specifications
10:00 -10:45	“Groningen” model in Rational Pharmacotherapy
11:00 - 12:00	Good Prescribing Guide
12:00 – 13:00	LUNCH BREAK
13:00 – 13:45	Personal Drugs, Introduction of the MAUA forms
14:00 – 16:00	Clinical Pharmacology of antihypertensive drugs
<b>TUESDAY</b>	
9:00 – 12:00	Student presentations of antihypertensive drugs
12:00 – 13:00	LUNCH BREAK
13:00 – 15:00	Personal drugs for hypertension 1
<b>WEDNESDAY</b>	
9:00 - 11:00	Personal drugs for hypertension 2
11:00 - 12:00	Solving case studies for hypertension
12:00 – 13:00	LUNCH BREAK
13:00 - 15:00	Further case studies on hypertension
<b>THURSDAY</b>	
10:00 - 12:00	Urinary tract infections, goals of therapy and non-pharmacological therapy methods
12:00 – 13:00	LUNCH BREAK
13:00 – 16:00	Personal drugs for urinary tract infections
<b>FRIDAY</b>	
9:00 - 12:00	Solving case studies for urinary tract infections
12:00 – 13:00	LUNCH BREAK
13:00 – 16:00	Further case studies on urinary tract infections

DAY	TOPIC
<b>MONDAY</b> 9:00 – 12:00	Antimicrobials for tonsillopharyngitis
12:00 – 13:00	LUNCH BREAK
13:00 – 16:00	Determination of P-drugs for tonsillopharyngitis 1
<b>TUESDAY</b> 9:00 – 12:00	Determination of P-drugs for tonsillopharyngitis 2
12:00 – 13:00	LUNCH BREAK
13:00 – 15:00	Solving case studies in tonsillopharyngitis
<b>WEDNESDAY</b> 9:00 – 12:00	OSCE examination
12:00 – 13:00	LUNCH BREAK
13:00 – 16:00	Evaluation of the rational drug therapy clerkship

**CLINICAL PHARMACOLOGY (2nd Group)**  
**RATIONAL PHARMACOTHERAPY – RATIONAL DRUG USE**  
**Prof.Dr. Ece Genç, Prof. Dr. Serdar Alpan, Prof. Dr.Zafer Gören (1,5 week)**

DAY	TOPIC
<b>THURSDAY</b>	
9:00 - 9:45	Introduction to the program, OSCE Examination and its specifications
10:00 -10:45	“Groningen” model in Rational Pharmacotherapy
11:00 - 12:00	Good Prescribing Guide
12:00 – 13:00	LUNCH BREAK
13:00 – 13:45	Personal Drugs, Introduction of the MAUA forms
14:00 – 16:00	Clinical Pharmacology of antihypertensive drugs
<b>FRIDAY</b>	
9:00 – 12:00	Student presentations of antihypertensive drugs
12:00 – 13:00	LUNCH BREAK
13:00 – 15:00	Personal drugs for hypertension 1
<b>MONDAY</b>	
9:00 - 11:00	Personal drugs for hypertension 2
11:00 - 12:00	Solving case studies for hypertension
12:00 – 13:00	LUNCH BREAK
13:00 - 15:00	Further case studies on hypertension
<b>TUESDAY</b>	
10:00 - 12:00	Urinary tract infections, goals of therapy and non-pharmacological therapy methods
12:00 – 13:00	LUNCH BREAK
13:00 – 16:00	Personal drugs for urinary tract infections
<b>WEDNESDAY</b>	
9:00 - 12:00	Solving case studies for urinary tract infections
12:00 – 13:00	LUNCH BREAK
13:00 – 16:00	Further case studies on urinary tract infections

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