1. NAME OF THE CLINICAL SCIENCE-TRAINING

MED 464 PEDIATRICS

2. DESCRIPTION

For the student, we firstly aim an introduction to general pediatrics, critical care and subspecialty areas in pediatrics. Basic subjects such as growth, development, and vaccination in general pediatrics, and in all subspecialties instructed by theoretical lessons, clinical practise, case and mortality meeting, seminars and journal club. We have constructed a schedule of balance between theoretical lessons and applied pediatrics.

Clinical practice will be done in general pediatrics, neonatology, cardiology, hematology, nephrology, allergy, endocrinology, intensive care, emergency services and section of ambulatory pediatrics. These practices carried out supervision of academic staff. Theoretical lessons and practices are provided by our full-time faculty professionals and fellows.

3. LEVEL

a. Prerequisities of the Course

None

b. Objectives:

In this clinical program, our goal is provide the knowledge to the students about children and their disorders, critical thinking and questioning, responsibility in a patient, clinical practice and judgement.

c. Learning Outcomes of the Course

The students are expected to be able to understanding, management and treatment of the childhood diseases.

d. References of the Course

Textbooks:

1. Behrman RE, Kliegman RM, Jenson HB, Stanton BF (2007) Nelson Textbook of Pediatrics. 18th Edition. W.B. Saunders Company, Philadelphia.

2. Hay WW, Levin MJ, Sondheimer JM, Deterding RR (2009) Current Pediatric Diagnosis & Treatment. 16th International edition. Lange Medical Books, McGraw-Hill Companies Inc., NY.

3. Rudolph CD, Rudolph AM. (2002) Rudolph's Pediatrics. 21st International Edition, McGraw-Hill Companies Inc., NY.

4. Yurdakök M, Erdem G. (2004) Neonatoloji. Türk Neonatoloji Derneği Yayını. Alp Ofset, Ankara.

Periodicals:

1. The Turkish Journal of Pediatrics. ISSN 0041-4301.

2. Çocuk Sağlığı ve Hastalıkları Dergisi. ISSN 0010-0161.

3. Katkı Pediatri Dergisi, Published by Hacettepe University Medical Faculty, Department of Pediatrics. ISSN 1300-4336

4. Pediatrics. ISSN: 0031-4005

5. Journal of Pediatrics. ISSN: 0022-3476

6. European Journal of Pediatrics. ISSN: 0340-6199

4. THE STATUS OF THE COURSE (COMPULSORY/ELECTIVE)

This course is a compulsory course.

5. TEACHING STAF

Head of Department of Pediatrics

Prof. Dr. Esra Baskın

Pediatric Oncology

Faik Sarıalioğlu, Professor

Pediatric Nephrology

Dr. Esra Baskın, Professor
Dr. Umut Bayrakçı, Associate Professor
Uzm Dr. Aslı Kantar

Pediatric Cardiology

Prof. Dr. Kürşat Tokel (İstanbul)
Prof. Dr. Birgül Varan
Doç. Dr. İlkay Erdoğan

Neonatology

Doç. Dr. Aylin Tarcan
Yrd.Doç. Dr. Ayşe Ecevit
Uzman Dr. Aslıhan Abbasoğlu
Uzman Dr. Ulaş Tuğcu

Pediatric Hematology Oncology

Prof. Dr. Faik Sarıalioğlu
Doç.Dr. Nalan Yazıcı
Doç.Dr. Ayşe Erbay

Pediatric Neurology

Doç. Dr. İlknur Erol
Uzman Dr. Taner Sezer

Pediatric Endocrinology

Dr. Sibel Kınık, Professor

Pediatric Gastroenterology, Hepatology, and Nutrition

Dr. Figen Özçay, Professor

Pediatric Allergy

Dr. Özlem Yılmaz Özbek, Associate Professor

Pediatric Genetic

Dr. Murat Derbent, Professor

Pediatric Infection

Prof. Dr. Zafer Ecevit

Developmental Pediatri

Yrd. Doç.Dr. Gülsüm Atay

6. THE PERIOD AND THE PLAN OF THE COURSE

The period of this clinical training is 8 weeks. Education will be constructed to subjects concerning both general and subspecialty areas in pediatrics. These main topics and details of the lessons are as follows:

General Pediatrics	Growth and development, feeding, vaccination, screening programs, common viral and parasitic infections, upper and lower respiratory tract infections, intoxication, basic and advanced life support, pediatric emergency.
Pediatric Nephrology	Fluid and electrolits, acute and chronic renal failure, nephritic and nephrotic syndromes, hypertension, collagen tissue disorders, FMF, vasculitic syndromes, urinary tract infections.
Pediatric Cardiology	Congenital cardiac malformations, dysrhythmias, acute rheumatic fever, heart failure, cardiac involvement on systemic disease, endocardits, myocardits and pericarditis.
Neonatology	Common clinical problems such as respiratory and metabolic, physicological features, growth and development, feeding, icter, neonatal and perinatal infections.
Pediatric Oncology	General principles of pediatric tumors, lymphomas, solid tumors
Pediatric Hematology	Thrombosis and hemostasis, congenital and acquired childhood anemias, childhood malignancies, bleeding disorders, basic immunology and common immune disorders.
Pediatric Neurology	Paroxysmal disorders and epilepsy, movement disorders, coma, stroke, nervous

	system infections, headache, increased intracranial pressure, mental retardation, muscle disease.
Pediatric Endocrinology	Puberty and its disorders, obesity, short stature, disorders of calcium metabolism, diabetes mellitus and insipidus, disorders of the tyroid gland, disorders of the sex differentiation, hipotalomo-hypophysial and adrenal disorders.
Pediatric Gastroenterology, Hepatology and Nutrition	Acute and chronic liver disease, acute and chronic hepatitis, acute hepatic failure, liver transplantation, metabolism and related disease, abdominal pain, inflammatory bowel disease, chronic diarrhea, malnutrition, enteral and parenteral feeding.
Pediatric Allergy	Immune response and hypersensitivity, allergic mechanisms, allergic rhinitis, conjunctivitis, asthma, atopic dermatitis, drug and food allergy, urticaria, angioedema, anaphylaxis
Pediatric Genetics and Clinical Dysmorphology	Common chromosomal disorders, microdeletion syndromes, congenital malformations, dysmorphology and craniofacial malformations, approach to genetic syndromes.

Lessons
1. Approach to the febrile child
2. Infectious Papulovesicular disease
3. Infectious Papulovesicular disease
4. Poisoning
5. Parasitic infections
6. Tuberculosis
7. Chromosomal disorders and microdeletion syndromes
8. Acute gastroenteritis
9. Chronic diarrhea
10. Malnutrition
11. Viral Hepatitis
12.Cirrhosis and portal hipertansion
13. Hepatic encephalopathy
14. Hyperbilirubinemia in the newborn
15. Nenatal sepsis
16. Neonatal resuscitation
17. Metabolic disorders in the newborn
18. Growth and sexual disturbances in children
19. Guatr and hypothyroidism
20. Diabetes mellitus in children
21. Rickets
22. Pediatric immunization-I
23. Pediatric immunization-II
24. Pediatric nutrition-I
25. Pedaitric nutrition-II
26. Menengitis
27. Coma
28. Convulsions
29. Encephalitis

30. Acute flask paralysis
31. Anemia in the newborn and childhood
32. Hemorrhagic diathesis and treatment
33. Platelet disorders and treatment
34. Leukemia
35. Principles in the blood transfusion
36. Immune deficiency disorders-I
37. Immune deficiency disorders-II
38. Hemoglobinopathies and erythrocytes enzyme deficiency-I
39. Hemoglobinopathies and erythrocytes enzyme deficiency-II
40. General features in the pediatric tumors
41. Lymphoma
42. Solid tumors-I
43. Solid tumors-II
44. Respiratory tract infections
45. Pneumonia
46. Bronchial asthma and its treatment
47. Anaphylaxis
48. Acute renal failure
49. Treatment of the fluid and electrolytes disturbance
50. Kollejen doku hastalığı. Collagen tissue disorders
51. Vasculitic disorders
52. Nephritic and nephritic syndromes
53. Urinary tract infections
54. Chronic renal failure
55. Diagnostic methods in cardiology (Electrocardiography, echocardiography)
56. Arrhythmia
57. Disorders associated with the left to right shunt
58. Cyanosis
59. Disorders associated with the right to left shunt
60. Acute rheumatic fever
61. Heart failure and treatment
62. Obstructive cardiac lesions and treatment

7. TEACHING AND LEARNING METHODS:

Theoretical lessons, clinical practice and applied pediatrics, seminars, case and mortality discussion meetings, and journal club.

8. ASSESMENT

Students will be responsible for all lessons and practice in this clinical training. Also students encouraged more reading and searching by *journal club* and *seminar*. Students must be attended at least 80 % of all theoretical and practical education. Students will be evaluated according to his/her performance on clinical practice and attendance to theoretical lessons, seminars, and journal club.

At the end of clinical training, final degree is determined by result of three examinations. Sixty points must be required for the student who is successful. The examinations and their percentage on final degree are as follows:

1. Theoretical verbal examination (40 %)
2. Theoretical test examination (50 %)

3. Practice on patient (10 %)

9. LANGUAGE

Language of the education is Turkish

10. ECTS CREDIT ALLOCATION : 12

1. **Identification of the course**
   MED 466 Medical school Phase IV-Internal Medicine

2. **Course description**

Training has been given about basic subjects of internal medicine and its branches during the first line health care and emercency services of adult patients and their health problems. For this purpose the education programme that contains theoretical lessons, clinical practices and case discussions are applied. Theoretical lessons includes biochemistry topics in order to enable them for easy diagnosis and pharmacological topics are for selection of best medicine.

3. **Level of the Course**

   a. **Prerequisities of the Course**
      none

   b. **Objectives of the course**
      The objective of the course is to familiarize students with the clinical and practical issues within internal medicine mainly and to help them to develop an understanding of clinical features, management and treatment modalities of acute and chronic diseases involved in primary care of adult patients. Additionally the students are taught to approach the adult patients, to plan differential diagnosis and consider treatment possibilities .Clinical visits teach the to take the responsiblity of the patients, expand their medical approach.

   c. **Learning Outcomes of the Course**
      The students are expected to be able to demonstrate detailed understanding of clinical features, management and treatment modalities of the disease and plan the first line therapy in acute and chronic diseases

   d. **References of the Course**
      CECIL TEXTBOOK OF MEDICINE, CECIL TEXTBOOK OF MEDICINE, 24th EDITION,2011
      Yazarları: Lee Goldman, MD, Julius Krevans Distinguished Professor and Chairman, Department of Medicine, Associate Dean for Clinical Affairs, University of California, San Francisco School of Medicine, San Francisco, CA; and Dennis Ausiello, MD, Department of Medicine, Massachusetts General Hospital, Boston, MA

      PRINCIPLES OF INTERNAL MEDICINE, 18th Edition, 2013

   The Status of the Course (Compulsory/Elective)
   This course is a compulsory course.

4. **Name of the Teaching Staff of the Course**

Haldun Selçuk, MD (Gastroenterology)
Murat Korkmaz, MD (Gastroenterology)
Hakan Ünal, MD (Gastroenterology)
Savaş Göktürk, MD (Gastroenterology)
Ülkü Dağlı, MD (Gastroenterology)
Birol Özer, MD (Gastroenterology)
Ender Serin, MD (Gastroenterology)
Nurhan Özdemir Acar, MD (Nephrology)

Siren Sezer, MD (Nephrology)
Turan Çolak, MD (Nephrology)
Emre Tutal, MD (Nephrology)
Eftal Yücel, MD (Rheumatology)
Özgür Özyılkan, MD (Medical Oncology)
Özden Altundağ, MD (Medical Oncology)
Ömer Dizdar, MD (Medical Oncology)
Nilgün Güvener Demirağ, MD (Endocrinology and Metabolism)
Neslihan Başçıl Tütüncü, MD (Endocrinology and Metabolism)
Mehlika Işıldak, MD (Endocrinology and Metabolism)
Eda Ertörer, MD (Endocrinology and Metabolism)
Aslı Nar, MD (Endocrinology and Metabolism)
Sema Karakuş, MD (Haemotology)
Selami Koçak Toprak, MD (Haemotology)
Ebru Koca, MD (Haemotology)
Müge Tecder Ünal, MD (Clinical Pharmacology)
Remzi Erdem, MD (Clinical Pharmacology)
Derya Aldemir, MD (Clinical Biochemistry)

5. The Period and the Plan of the Course

1. and 2. weeks includes theoretical lessons. Weeks 3,4,5,6,7,and 8 includes visits to departments of internal medicine, bed side interview with the teaching staff and take practical courses on patients. Students join daily clinical practice and meet in hospital and out-hospital patients.

Theoretical topics to be covered are as follows:

A)THEORETICAL TOPICS

1-Malnutrition

2-Lymphadenopathies

3-Endocrine Hypertension

4-Endocrine Emergencies

5- Early diagnosis saves life

6- Cancer of Unknown Primary

7-Clinical Approach in Rheumatology

8-Gastrointestinal Bleeding

9-Paraneoplastic Syndromes

10-Complications seen in cancer patients

11- Laboratory findings of kidney diseases

12- Laboratory findings of fluid-electrolyte and acid-base disorders

13-Diabetes Mellitus

14-Abdominal Pain

15-Breast Cancer

16-Diffirential diagnosis of arthritis

17-Rheumatoid arthritis

18- Laboratory findings of cardiovascular system

19-Dyspepsy

20- Clinical Approach in Rheumatology

21-Acites

22-Hepatic encephalopathy

23- Approach of fluid and acid-base

24-Jaundice

25- Laboratory findings of liver functions

26- Analysis of urine

27-Osteoarthritis

28-Systemic Lupus Erythematosus

29-Diagnosis and treatment of nephrotic syndrome

30-Acute renal failure and Crush Syndrome

31-Myeloproliferatif Diseases

32-Invasive Processses in gastroenterology

33-clinical approach to calcium, phosphorus and magnesium balance

34- Diagnosis and treatment of nephrotic syndrome

35-Iron deficiency anemia

36- Bleeding diathesis

37- Microangiopathic hemolytic anemias

38-Approach to the patient with thyroid disease

39-Pain in cancer

40-Oncological Emergencies

41-Hypertension and kidney, selection of the antihipertensive medicines

42-Chronic renal failure

43- Hypercoagulation

44-Macrocytic anemias

45-Aplastic anemia

46- Practical course for Clinical Pharmacology (22 hours)

6. Teaching and Learning Methods of the Course

The course will consist of lectures and practical training (interviewing patients with the students and clinical discussions).

7. Assessment Methods and Grading of the Course

There will be (60%) and written (40%) examinations.

8. Language of Instruction
Turkish

9. ECTS Credit Allocation : 12

1. **IDENTIFICATION OF THE COURSE**
   MED 474 Medical school Phase IV-Dermatology

2. **Course description**

   This course reviews major themes in dermatology. Dermatology is the branch of internal medicine that focuses on the diagnosis and treatment of skin disorders. The primary purposes of dermatology are to define and recognize disorders, to identify methods for treating them, and ultimately to develop methods for discovering their causes and implementing preventive measures.
   After a brief overview of the course, we will examine a number of theoretical and substantive issues in the area of dermatology. We will start off by considering various signs and symptoms in dermatology. This will include clinical examination of the dermatologic patient. After teaching the basic structure of the skin, we will then proceed to address signs and symptoms, management, and treatment of infectious diseases of the skin, eczemas, venereal diseases, neoplasms of the skin (melanoma and non-melanoma), and benign tumors of the skin, urticaria and angioedema, vasculitis, chronic blistering dermatoses, papulosquamous skin diseases, pruritus, leg ulcers, recurrent aphtous stomatitis and Behçet's disease, diseases of the skin appendages, drug eruptions, pigmentary disorders, diseases of the connective tissue and diseases of the hair. Besides the theoretical classes, interviewing patients with the teaching staff member and clinical discussions will also be performed. Journal club and seminars are also an important part of this course.

3. **Level of the Course**

   a. **Prerequisities of the Course**
      None

   b. **Objectives of the course**
      The objective of the course is to familiarize students with the clinical issues within dermatology mainly and to help them to develop an understanding of clinical features, management and treatment modalities of major skin disorders.

   c. **Learning Outcomes of the Course**
      The students are expected to be able to demonstrate detailed understanding of clinical features, management and treatment modalities of the skin disorders.

   d. **References of the Course**
      Tüzün Y, Gürer MA, Serdaroğlu S, Oğuz O, Aksungur V. (2008) Dermatoloji, 3. baskı, İstanbul, Cem Ofset Matbaacılık.

      Wolff K, Johnson RA, Suurmond D. (2008) Fitzpatrick's Color Atlas and Synopsis of Clinical Dermatology, Seventh Edition, New York: Mc-Graw Hill.

4. **The Status of the Course (Compulsory/Elective)**
   This course is a compulsory course.

5. **Name of the Teaching Staff of the Course**

Prof. Dr. Deniz Seçkin
Prof. Dr. A. Tülin Güleç
Prof. Dr. Mete Baba (Adana)
Assoc. Prof. Dr. Murat Durdu (Adana)
Assist. Prof. Dr. Deren Özcan
Assist. Prof. Dr. Recep Dursun (Konya)
Assist. Prof. Dr. Çiçek Durusoy (Alanya)

6. The Period and the Plan of the Course

This is a three-week course. Theoretical and practical topics to be covered are as follows:

Topics of the course
Week I.
1. Examining the dermatology patient, and the dermatologic diagnostic tools
2. Basic structure of the skin, and the cutaneous signs
3. Superficial fungal infections of the skin
4. Bacterial infections of the skin
5. Viral infections of the skin
6. Parasitic infections of the skin
7. Eczemas
Week II.
8. Venereal diseases
9. Neoplasms of the skin (melanoma and non-melanoma), and benign tumors of the skin
10. Urticaria and angioedema
11. Vasculitis
12. Chronic blistering dermatoses
13. Papulosquamous skin diseases
14. Pruritus 15. Leg ulcers
Week III. 16. Recurrent aphtous stomatitis and Behçet's disease 17. Diseases of the skin appendages 18. Drug eruptions 19. Pigmentary disorders 20. Diseases of the connective tissue 21. Diseases of the hair

7. Teaching and Learning Methods of the Course

The course will consist of lectures, journal club, seminars and practical training (interviewing patients with the students and clinical discussions).

8. Assessment Methods and Grading of the Course

There will be oral (50%) and written (50%) examinations.

9. Language of Instruction
Turkish

10. ECTS Credit Allocation :5

1. **IDENTIFICATION OF THE COURSE: Medical School Phase IV: MED 475: Physical Medicine and Rehabilitation (PM&R)**

2. **COURSE DESCRIPTION**

This course reviews philosophy, objectives, methodology and fundamentals of Physical and Rehabilitation Medicine. The course starts off by an orientation program. Physiatric history taking, clinical and functional assessment methods in PMR and clinical assessment of joints and muscles and of motor and sensory function are reviewed. Than principals of exercise physiology, therapeutic exercises, orthopaedic, rheumatologic and neurologic rehabilitation are reviewed and demonstrated in clinical practise. Clinical features and therapeutic interventions in major clinical problems in rehabilitation medicine such as stroke, traumatic brain injury, cerebral palsy, spinal disraphism, and spinal cord injury are evaluated.

3. **LEVEL OF THE COURSE**

a. Prerequisites: None.

b. Objectives: The objectives of the course are 1) to teach clinical and functional assessment methods in locomotor system disorders and disabled conditions; 2) to provide therapeutic and diagnostic knowledge and to improve students ability for clinical application of knowledge; 3) to familiarize students with inpatient follow up and outpatient examination

c. Learning outcomes

After the course completed students are expected to be able to evaluate patients with disabling conditions especially due to neurological, orthopaedic, rheumatological disorders and also be able to manage patients with locomotor system disorders according to clinical features, differential diagnosis and treatment modalities.

d. References:

1. Basmajian JV, Wolf SL. (1990) Therapeutic Exercise. 5th edition, Baltimore: Williams & Wilkins.
2. Beyazova M, Gökçe-Kutsal Y. (2011) Fiziksel Tıp ve Rehabilitasyon, Ankara: Güneş Kitabevi.
3. Borenstein DG, Wiesel SW, Boden S. (2004) Low Back and Neck Pain: Comprehensive Diagnosis and Management Philadelphia: WB Saunders Company.
4. Braddom RL. (2006) Physical Medicine and Rehabilitation. 3rd edition, Philadelphia: WB Saunders Company
5. Brammer CM, Spires MC. (Çeviri editörleri: Beyazova M, Gökçe-Kutsal Y) (2003). Fiziksel Tıp ve Rehabilitasyon el kitabı. Ankara: Güneş Kitabevi; Philadelphia: Hanley & Belfus, Inc.
6. Bunch WH, Keagy R, Kritter AE, Kruger LM, Letts M, Lonstein JE, Marsolais EB, Matthews JG, Pedegana LR (1985) American Academy of Orthopaedic Surgeans: Atlas of orthotics. 2nd edition, St Louis: The C.V. Mosby Company
7. Cailliet R. (1988). Pain series: Low back pain syndrome. 4th edition, Philadelphia: F.A. Davis Company
8. Castro WHM, Jerosch J, Grossman TW. (2001) Examination and diagnosis of musculoskeletal disorders. Stuttgart: Thieme
9. DeLisa JA, Gans BM, Walsch NE, Boskenek WL, Frontera WR. (2006) Rehabilitation Medicine: Principals and practise 4th edition, Philadelphia: Lippincott Williams&Wilkins
10. Hoppenfeld S. (1976) Physical examination of the spine and extremities. New York: Appleton-Century-Crofts
11. Lazar RB (1998) Principles of neurological rehabilitation. New York: McGraw-HillMolnar GE, Alexander MA. (1999) Pediatric Rehabilitation. 3rd edition, Philadelphis: Hanley & Belfus, Inc.
12. Molnar GE, Alexander MA (1999). Pediatric rehabilitation. Philadelphia: Hanley & Belfus Inc.
13. Nickel VL, Botte MJ. (1992) Orthopaedic Rehabilitation. 2nd edition, New York: Churchill Livingstone
14. Oğuz H, Dursun E, Dursun N. (2004) Tıbbi Rehabilitasyon. 2. baskı, Ankara: Nobel Tıp Kitabevleri

15. Firestein GS, Ralph C. Budd RC, Harris ED, McInnes IB, Ruddy S, Sergent JS. (2008) Kelley's Textbook of Rheumatology. 8th edition, Philadelphia: W.B. Saunders Company.

4. THE STATUS OF THE COURSE (MANDATORY OR OPTINAL)

This course is a mandatory course

5. TEACHING STAFF

Metin Karataş MD, Professor of PM&R

Seyhan Sözay MD, Associate Professor of PM&R

Şehri Kılınç Ayaş MD, Associate Professor of PM&R

Nuri Çetin MD, Associate Professor of PM&R

Nur Saraçgil MD, Asistant Professor of PM&R

Oya Yemişçi, Asistant Professor of PM&R

Sevgi İkbali Afşar, Specialist of PM&R

6. THE LENGTH OF PERIOD AND PLAN OF THE COURSE

This course is a 2 weeks (12 day) course. Topics to be covered are as follows

Day 1	Management of patient with musculoskeletal disorders and physical examination Exercise physiology
Day 2	Management of a patient with low back pain
Day 3	Rehabilitation after orthopaedic surgery and rehabilitation of sports injury
Day 4	Rehabilitation of stroke
Day 5	Osteoporosis
Day 6	Rehabilitation of traumatic brain injury patients
Day 7	Principals of therapeutic exercise
Day 8	Spinal cord injury: Complications; rehabilitation principals
Day 9	Cerebral palsy, spinal disraphism
Day 10	pressure ulcers
Day 11	Focal neuropathies
Day 12	Clinical management of degenerative joint diseases

7. TEACHING AND LEARNING METHODS

The course will consist of lectures, rounds, class and bedside discussions and reading assignments.

8. ASSESSMENT

Students will principally be responsible from lectures; bedside educational activities and inpatient follow up. Some supplementary books and reference textbooks are also suggested. Students are expected to attend classes,

rounds and bedside activities regularly. At least 90% attendance is required. Students are expected to read assigned material in advance to be ready to participate to bedside discussions. There will be a final exam at the end of the course. Each student will be evaluated according to his/her performance during physical examination, inpatient follow up and attitude to patients, therapeutic and diagnostic knowledge and clinical application of knowledge.

9. LANGUAGE: The language of the course is Turkish.

10. ECTS Credit Allocation : 4

MED PULMONARY DISEASES

MED 477

1. DESCRIPTION

This course reviews basic subjects in pulmonary diseases. After a brief overview of the course, the course deals with basic lessons of all respiratory systems as well as immunulogic and molecular and pathophysiologic mechanisms of diseases.

2. LEVEL

a. Prerequisite: None

b. Objectives: The objective of the course is to familiarize students with the basic concepts and nomenclature in symptomatology and physical examination of pulmonary diseases and to help them to develop an understanding of the major respiratory pathologies using immonologic, molecular and pathophysiologic mechanisms.

c. Learning outcomes: At the end of the course the student is expected to be able to learn the more common respiratory diseases.

d. References:

Textbooks

1) Pulmonary Diseases and Disorders Third Edition. Fishman Textbook, 2008.

2) Respiratory System and Diseases: Basic Principles 1st Edition. Özlü, Metintaş, Karadağ; Kaya, 2010

3. MANDATORY OR OPTIONAL COURSE

This course is a mandatory course.

4. TEACHING STAFF

Füsun Eyüboğlu, M.D. Prof. (Ankara)
Şule Akçay, M.D. Prof. (Ankara)
Gaye Ulubay, M.D. Assoc. Prof. (Ankara)
Nazan Şen, MD. Assoc Prof. (Adana)
Şerife Savaş Bozbaş M.D Assoc Prof (Ankara)
Elif Küpeli M.D Assoc Prof (Ankara)
Mehmet Ali Habeşoğlu Assoc Prof (Adana)
Hüseyin Lakadamyalı M.D Assoc Prof (Alanya)
Aylin Özsancak Uğurlu MD Asist Prof (İstanbul)

5. LENGTH AND PERIOD

This course includes 3 weeks of lectures. Topics to be covered are as follows:

1st week	History and physical exam in respiratory diseases, chest x-ray evaluation, pulmonary function tests, asthma, sleep apnea syndrome, ARDS, pulmonary emboli, lung cancer, tuberculosis	
2nd week	Bronchoscopy, idiopathic pulmonary fibrosis, COPD, bronchiectasis, community aquired pneumonia, hospital aquired pneumonia, sarcoidosis	
3rd week	Pleural diseases, smoking addiction and cessation treatments, ABG practices, radiology practices, TUS (exam for specialization) questions	

6. TEACHING AND LEARNING METHODS OF THE COURSE

This course includes lectures, class discussions and laboratuary practises. At the end of the period of 3 weeks, examinations will be done.

7. THE LANGUAGE OF INSTRUCTION

Turkish.

8. ECTS CREDIT ALLOCATION : 5

1. IDENTIFICATION OF THE COURSE

MED 481 Cardiology (Medical school Phase IV)

2. COURSE DESCRIPTION

Cardiology course for fourth year medical students aims to teach the students how to use the theoretical information given in the third year in clinical situations. During the course, several lectures about heart diseases will be given by the staff, but the training predominantly will be at the bedside.

3. LEVEL OF THE COURSE

a. Prerequisities of the Course

none

b. Objectives of the course

Our goal is provide the knowledge to the students about sign and symptoms, differential diagnosis and treatment of the cardiovascular disorders.

c. Learning Outcomes of the Course

At the end of this course, the student is expected to be able to

- take history from a patient appropriately, do physical examination and identify distinctive symptoms and signs
- Make a differential diagnosis based on the symptoms and signs
- Plan treatment in major cardiovascular diseases
-

d. References of the Course

Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, 8th ed. 2007 Saunders

Lecture notes

4. THE STATUS OF THE COURSE (COMPULSORY/ELECTİVE)

This course is a compulsory course.

5. TEACHING STAF

Prof. Dr. Haldun Müderrisoğlu
Prof. Dr. Bülent Özin
Prof. Dr. Aylin Yıldırır
Doç. Dr. Melek Uluçam
Doç. Dr. L. Elif Sade
Doç. Dr. İlyas Atar
Doç. Dr. Bahar Pirat
Doç. Dr. Serpil Eroğlu
Doç. Dr. Alp Aydınalp
Yrd. Doç. Dr. Kaan Okyay
Öğr. Gör. Dr. Uğur Bal

6. THE PERİOD AND THE PLAN OF THE COURSE

This course is a 3-week course and is obligatory. It consists of 7 3-hour lectures, 7 1-hour lectures, 4 3-hour bedside education, 1 3-hour seminar and one-to-one education in the Cardiology Clinics.

7. TEACHİNG AND LEARNİNG METHODS OF THE COURSE

Lectures, practical training, service visits, case and clinical discussions.

8. ASSESSMENT METHODS AND GRADİNG OF THE COURSE

Students will be responsible for all lessons and practice in this clinical training. Also students encouraged more reading and searching by *journal club* and *seminar*. Students must be attended at least 80 % of all theoretical and practical education. At the end of first and second weeks 2 written formative examinations is performed (20% of the total point). Sixty points must be required for the student who is successful. Final examination will be verbal (50%) and written (30%) examinations.

9. LANGUAGE OF INSTRUCTİON

Turkish

10. ECTS CREDIT ALLOCATION : 5

1. IDENTIFICATION OF THE COURSE

MED 483 Medical School Phase IV- **INFECTIOUS DISEASES**

2. COURSE DESCRIPTION

This course reviews the causative agents, epidemiology, pathogenesis, clinical findings and treatment of infectious diseases particularly the ones endemic in our country.

Basic subjects will be instructed by theoretical lessons, clinical and laboratory practices, seminars, case and article discussions. Theoretical lessons and practice hours are balanced thoroughout the course.

Clinical practices are done in the hospital service, laboratory practices are perfomed in the microbiology laboratory. These practices are carried out by the supervision of academic staff. Theoretical lessons and practices are provided by our full-time faculty professionals.

3. LEVEL AND PREREQUISITIES OF THE COURSE

a. Prerequisities

None

b. Objective:

In this clinical program, our goal is to provide the knowledge to the students about the diagnosis, treatment, prevention of infectious diseases along with critical thinking, questioning and responsibility in a patient.

c. Learning outcomes:

The students are expected to be able to demonstrate detailed understanding of clinical features, management and treatment modalities of infectious diseases.

e. References:

Textbook:

1. Mandell, Douglas, Bennett (eds) (2010) Principles and Practice of Infectious Disease 7th Edition. Elsevier Churhill Livingstone Philadelphia.

2. Wilke Topçu A, Söyletir G, Doğanay M. (2008) Enfeksiyon Hastalıkları ve Mikrobiyolojisi 3.baskı, Nobel Tıp Kitapevleri, Ankara

Periodicals

1. Clinical Infectious Diseases
2. Clinical Microbiology and Infection
3. Mikrobiyoloji Bülteni

4. THE STATUS OF THE COURSE (COMPULSORY/ELECTIVE)

This course is a compulsory course.

5. TEACHING STAF

Prof. Dr. Hande Arslan

Assoc. Prof. Dr. Özlem Kurt Azap

Specialist. Ayşegül Yeşilkaya

6. THE PERIOD AND THE PLAN OF THE COURSE

The period of this clinical training is 2 weeks. Education will be constructed to subjects concerning both theoretical and laboratory aspects of infectious diseases. These main topics of the lessons are as follows:

1. Virulence factors of bacteria
2. Influenza
3. Malaria
4. Fever and rash
5. HIV/AIDS
6. Extrapulmonary tuberculosis
7. Brucellosis
8 Tetanus
9. Treatment of acute bacterial meningitis
10. Skin and soft tissue infections
11. Fever of unknown origin
12. Immunization
13. Crimean-Congo Hemorrhagic Fever
14. Sepsis
15. Nosocomial infections
16. Systemic diseases associated with lymhadenopathy
17. Approach to a patient with fever (interactive lesson)
18. Acute gastroenteritis (interactive lesson)
19. Urinary tract infections (interactive lesson)
20. Acute bacterial meningitis (interactive lesson)
21. Acute viral hepatitis (interactive lesson)

22. Health care workers' health (interactive lesson)

7. TEACHING AND LEARNING METHODS:

Theoretical lessons, clinical and laboratory practice, interactive lessons, seminars, case and article discussions.

8. ASSESMENT

Students will be responsible for all lessons and practice in this clinical training. Also students encouraged more reading and searching by article discussions and seminars. Students must be attended at least 80 % of all theoretical and practical education. Students will be evaluated according to his/her performance on clinical practice and attendance to theoretical lessons, seminars, and journal club.

At the end of clinical training, final degree is determined by result of three examinations. Sixty points must be required for the student who is successful. The examinations and their percentage on final degree are as follows:

1. Theoretical verbal examination (40 %)
2. Theoretical test examination (40 %)
3. Laboratory practice (20 %)

9. LANGUAGE

Language of the education is Turkish

10. ECTS CREDIT ALLOCATION : 4

1. **IDENTIFICATION OF THE COURSE**
   MED 484 Medical school Phase IV-Neurology

2. **Course description**

   In this course neurological diseases, their symptoms and findings, diagnostic tests, differential diagnosis and treatments are reviewed. Along with the lectures neurological examination of the patients and clinical discussions take place with the teaching staff members.

3. **Level of the Course**

a. Prerequisities of the Course

none

b. Objectives of the course

The objective of the course is to train students for gaining knowledge and skills in diagnosis and emergency treatment of neurological disorders and transferring them to secondary step facilities when needed.

c. Learning Outcomes of the Course

The students are expected to be able to demonstrate detailed understanding of clinical features, management and treatment modalities of the neurological disorders.

d. References of the Course

1. Resimli Açıklamaları ile Nöroloji ve Nöroşirürji: Türkçeleştiren ve yayına hazırlayan: Doç. Dr. Mustafa Bozbuğa, 2000 Nobel Tıp Kitabevleri
2. Neurology in Clinical Practice: Principles of Diagnosis and Management; W.G. Bradley, R.B. Daroff, G.M. Fenichel, C.D. Marsden Editors USA: Butterworth-Heinemann 2008
3. Adams and Victor's Principles of Neurology: A.H. Ropper, R.H. Brown Editors: USA McGraw_Hill 2005
4. Merritt's Neurology: Rowland L.P. editor:Philadelphia Lippincott Williams and Wilkinson 2008

4. **The Status of the Course (Compulsory/Elective)**
   This course is a compulsory course.

5. **Name of the Teaching Staff of the Course**

   Prof. Dr. Ü. Sibel Benli
   Prof. Dr. Ufuk Can
   Assoc Prof. Dr. Münire Kılınç Toprak
   Dr. Seda Kibaroğlu
   Dr. Eda Derle

6. **The Period and the Plan of the Course**

   This is a three-week course. Lectures and practical topics to be covered are as follows:

Lectures:

1	Migraine and other craniofacial pain syndromes
2	Vertigo
3	Cranial nerves and their disorders (1)
4	Cranial nerves and their disorders (2)
5	Spinal cord disorders (1)
6	Spinal cord disorders (2)
7	Neuromuscular junction disorders
8	Speech disorders, apraxias and agnosias
9	Akinetic rijid syndromes and parkinsonism
10	Multiple sclerosis and other demyelinating disorders (1)

11	Multiple sclerosis and other demyelinating disorders (2)
12	Entrapment neuropathies and plexopathies
13	Dementias
14	Motor neuron diseases
15	Epilepsias (1)
16	Epilepsias (2)
17	Hyperkinetic movement disorders
18	Hereditary and Inflammatory muscle diseases
19	Ischemic cerebrovascular disorders: Carotid system and syndromes
20	Ischemic cerebrovascular disorders: Vertebrobasillary system and syndromes
21	Hemorrhagic cerebrovascular disorders and treatment
22	Cerebral veins, sinuses and venous sinus thrombosis
23	Coma
24	Neurological complications of systemic diseases (1)
25	Neurological complications of systemic diseases (2)
26	Disorders of cerebrospinal fluid circulation
27	Peripheral nerve disorders
28	Infections of the nervous system (1)
29	Infections of the nervous system (2)
30	Neurocutaneus syndromes

PRATİK DERS KONULARI :

KONULAR	
1	Neurological history taking
2	Cranial nerve examination
3	Motor examination
4	Examination of a patient in coma
5	Reflex examination
6	Cognitive examination
7	Examination of speech disorders
8	Cerebeller system examination
9	Extrapyramidal system examination
10	Sensory examination
11	Neurological evaluation of an inpatient
12	Neurological evaluation of an inpatient
13	Neurological evaluation of an inpatient
14	Neurological evaluation of an inpatient

7. Teaching and Learning Methods of the Course

The course will consist of lectures and practical training (interviewing patients with the students and clinical discussions).

8. Assessment Methods and Grading of the Course

There will be patient discussion(10%), written exam (40%) and oral exam (50%) for the evaluation.

9. Language of Instruction
Turkish

10. ECTS Credit Allocation : 5

1. IDENTIFICATION OF THE COURSE
MED 489 Medical school Phase IV-Psychiatry

2. Course description

This course reviews major themes in psychiatry. Psychiatry is the branch of medicine that focuses on the diagnosis and treatment of mental disorders. As a discipline within medicine, the primary purposes of psychiatry are to define and recognize disorders, to identify methods for treating them, and ultimately to develop methods for discovering their causes and implementing preventive measures. Neuroscience has provided psychiatrists with the tools by which they can have a better understanding of how the brain works and help them have a better grip of human emotion, thought and behavior, and develop sophisticated methods for treating abnormalities.

After a brief overview of the course, we will examine a number of theoretical and substantive issues in the area of psychiatry. We will start off by considering various signs and symptoms in psychiatry and mental status examination. This will include clinical examination of the psychiatric patient and also classification in psychiatry. We will then proceed to address signs and symptoms, management, and treatment of major psychiatric disorders like schizophrenia, other psychotic disorders, mood disorders, anxiety disorders, cognitive disorders, somatoform and related disorders, dissociative disorders, psychiatric emergencies, child psychiatry, personality disorders, forensic issues in psychiatry, substance-related disorders, eating disorders, sleep disorders, sexual and gender identity disorders, psychological testing, biological treatments, and psychotherapies. Besides the theoretical classes, interviewing patients with the teaching staff member and clinical discussions.

3. Level of the Course

a. Prerequisities of the Course

none

b. Objectives of the course

The objective of the course is to familiarize students with the clinical issues within psychiatry mainly and to help them to develop an understanding of clinical features, management and treatment modalities of major psychiatric disorders.

c. Learning Outcomes of the Course

The students are expected to be able to demonstrate detailed understanding of clinical features, management and treatment modalities of the psychiatric disorders.

d. References of the Course

Öztürk MO, Uluşahin A (2008) Ruh Sağlığı ve Bozuklukları, Ankara, Tuna Matbaacılık.

Sadock BJ, Sadock VA (2007) Kaplan and Sadock's Synopsis of Psychiatry Behavioral Sciences/Clinical Psychiatry, Tenth Edition, Philadelphia: Lippincott Williams & Wilkins.

4. The Status of the Course (Compulsory/Elective)
This course is a compulsory course.

5. Name of the Teaching Staff of the Course

Prof. Nilgün Taşkıntuna MD
Prof. Afşın Sağduyu MD
Prof. Erkan Özcan MD
Assoc. Prof. Gamze Özçürümez MD
Nurhak Çağatay MD
Güler Dalğar MD
Burcu Akın Sarı MD
Prof. Nesrin Hisli Şahin (Başkent University Department of Psychology)

6. The Period and the Plan of the Course

This is a three-week course. Theoretical and practical topics to be covered are as follows:

Week 1	Signs and Symptoms in Psychiatry and Mental Status Examination
	Brain and Behaviour
	Mood Disorders
	Somatoform and Related Disorders and Dissociative Disorders
	Schizophrenia, Delusional Disorder and Other Psychotic Disorders
	Interviewing patients with the students, clinical discussion
Week 2	Personality Disorders
	Delirium, Dementia, Amnesia and Other Cognitive Disorders
	Alcohol-Related Disorders and Other Substance Related Disorders
	Anxiety Disorders
	Interviewing patients with the students, clinical discussion
Week 3	Forensic Issues in Psychiatry
	Biological Therapies
	Clinical Psychological Testing and Psychotherapies
	Sexual and Gender Identity Disorders, Eating Disorders, and Sleep Disorders
	Interviewing patients with the students, clinical discussion

7. Teaching and Learning Methods of the Course

The course will consist of lectures and practical training (interviewing patients with the students and clinical discussions).

8. Assessment Methods and Grading of the Course

There will be oral (50%), written (40%) examinations and case assignment (%10).

9. Language of Instruction
Turkish

10. ECTS Credit Allocation : 5

1. IDENTIFICATION OF THE COURSE

MED 400 Medical School Phase IV - Introduction to Clinical Science

2. Course description

In the first three weeks of this course our aim is to give the fundamentals of patient-physician communication, patient approaching methods and patient management. Besides communication skills the students will be able to understand and take a medical patient history, perform a review of systems, take a personal and familial medical history, and to differentiate pathological examination findings and symptoms at the end of this course. The last one week of the course aims to give basic principles of radiological imaging methods: X-ray examination - plain film, fluoroscopy, computed tomography; Ultrasound, Magnetic Resonance Imaging and angiography. Basic practice of these methods in chest radiology, abdominal radiology, uroradiology, neuroradiology, musculo-skeletal and breast radiology are going to be discussed. Basic principles of Nuclear medicine, radiopharmaceuticals and use of radionuclide examinations in skeletal system, cardiovascular system, pulmonary systems, hematology, liver, spleen, genitourinary tract and endocrinology are going to be discussed. Imaging of tumours and inflammations and radionuclide therapy are also going to be held in this course. Besides the theoretical classes, workshops for medical history taking, physical examinations, evaluation of the laboratory tests and clinical discussions are going to be performed with the teaching staff members.

3. Level of the Course

a. Prerequisities of the Course

None

b. Objectives of the course

The objective of the course is to familiarize students with the clinics.

c. Learning Outcomes of the Course

The students are expected to be able to perform adequate communication, history taking and physical examination at the end of this course. They are expected to evaluate the clinical signs and symptoms and the treatment modalities of the disorders.

d. References of the Course

Henry M. Seidel MD, Jane W. Ball RN DrPH CPNP DPNAP, Joyce E. Dains DrPH JD RN FNP BC DPNAP, John A. Flynn MD MBA, Barry S Solomon MD MPH, Rosalyn W Stewart MD MS MBA. Mosby's Guide to Physical Examination, 7 th ed. (2011), Mosby – Elsevier Inc.

Mark H. Swartz MD FACP, Textbook of Physical Diagnosis: History and Examination With STUDENT CONSULT Online Access, 5th ed, Saunders Inc.

Kathleen Deska Pagana PhD RN, Timothy J. Pagana MD FACS (2006). Mosby's Manual of Diagnostic and Laboratory Tests, 4th ed., Mosby-Elsevier Inc.

Anthony S Fauci (2008) Harrison's Principles of Internal Medicine, 17ed, McGraw Hill

Stephen McPhee (2009) Current Medical Diagnosis and Treatment, McGraw Hill

David Sutton (2002) Textbook of Radiology and Imaging, 7ed, Churchill Livingstone

4. The Status of the Course (Compulsory/Elective)

This course is a compulsory course.

5. Name of the Teaching Staff of the Course

Altuğ Kut, MD
Kürşat Akatlı Özşahin MD
Ergün Öksüz MD
Ayşen Fenercioğlu MD
Süheyl Asma MD
Fisun Sözen MD
Yasemin Çetinel MD
Gökhan Eminsoy MD
Cihan Fidan MD
Hülya Parıldar MD
Özlem Ciğerli MD
Aydan Ünsal MD
İnci Turan MD
Gülsüm Teke Özgür MD
İclal Işıklar MD
Koray Hekimoğlu MD
Fuldem Yıldırım MD
Ali Harman MD
Arzu Gençoğlu MD
Nİhal Uslu MD
Emin Alp Niron MD
Çağla Tarhan MD
Umut Özyer MD
Tülin Yıldırım MD
Hasan Yerli MD
Remzi Erdem MD
Müge Tecder Ünal MD
Derya Aldemir MD

6. The Period and the Plan of the Course

This is a four-week course. Theoretical and practical topics to be covered are as follows:

Week 1	Methods of Approaching to The Patient in Primary Health Care
	Patient-Oriented Primary Care Propositions
	Patient – Physician Communucation
	Medical History Taking Format
	Review Of Systems (ROS)
	Inquisition Of Personal And Familial Medical History
	Patient Reactions and Cultural Variety in History Taking
	Interpreting the Medical History
	Evaluation of Patients Nutritional Status
Week 2	Basic Principles of the Physical Examination and Vital findings
	Basic Symptoms and Findings of the Skin, Examination Methods, Clinicopathologic Relations
	Basic Symptoms and Findings of the Respiratory System, Examination Methods, Clinicopathologic Relations.
	Basic Symptoms of the Head and Neck, Examination Methods, Clinicopathologic Relations
	Physiology and Structure of the Eye , Basic Symptoms and Findings, Examination Methods, Clincopathologic Relations
	Basic Symptoms and Findings of the Heart, Examination Methods, Clincopathologic Relations
	Physiology and Structure of the Peripheric Vasculer System, Basic Symptoms and Findings, Examination Methods, Clincopathologic Relations
	Physiology and Structure of the Breast, Basic Symptoms and Findings, Examination Methods, Clincopathologic Relations
Week 3	Basic Symptoms and Findings of the Abdomen, Examination Methods, Clincopathologic relations
	Basic Symptoms and Findings of the Genitourinary System, Examination Methods, Clincopathologic relations
	Examination of the Neurologic Reflexes and Basic Symptoms.
	Neurological Examination Methods
	Neuropsychiatric Examination Methods
	Musculoskeletal System Examination Methods and Clincopathologic Relations
	Bringing Findings and Symptoms Together
Week 4	Rational Use of Drugs
	Usage of Drugs in Special Situations
	Clinical Biochemistry - Patient Bed Side Analysis
	US, CT, and MRI technique and indications
	Conventional Radiology Techniques
	Interventional Radiology
	Radiology in Breast Diseases
	Radiology of the Hepatobiliary System
	Using Nuclear Medicine Methods in Endocrinology and Oncology
	Neuroradiology in CVD
	Radiology in Gynaecology and Obstetric
	Radiology in Gastrointestinal Diseases
	Radiology in Genitourinary Diseases
	Radiologic Anatomy of the Thorax
	Radiology of the Musculoskeletal System
	Radiology in Thorax Pathologies
	Radiology in Cardiovascular Diseases
	Nuclear Medicine Methods in Cardiovascular System Imaging
	Radionuclid Imaging of the Urogenital System
	Neuroradiology in Tumors and Infections
	Neuroradiology in Trauma

7. Teaching and Learning Methods of the Course

The course will consist of lectures and practical training.

8. Assessment Methods and Grading of the Course

There will be a written (60%) and a practical (40%) examination.

9. Language of Instruction

Turkish

10. ECTS Credit Allocation : 3