

<b>Name</b>	1 <sup>st</sup> Committee: PUBLIC HEALTH
<b>Status</b>	Compulsory
<b>ECTS credits</b>	4.9
<b>Responsibility</b>	Prof. Dr. Rengin Erdal
<b>Prerequisite</b>	None
<b>Period</b>	4 weeks, 91 hours
<b>Content</b>	In this course, the epidemiologic study techniques are overviewed and field application is the main outcome of this course. This course reviews some advanced statistical techniques. This course provides students with a broad overview of some of the main philosophy and philosophical theories and ideas that are used as a basis for resolving debates of public health in the country and in the world. The course includes basic concepts of modern public health issues in the country and in the world.
<b>Objectives</b>	The aim of this course is to enable the students to plan, design, conduct and terminate successfully an Epidemiologic study, to learn and analyze the main public health concepts and principles.
<b>Learning Outcomes</b>	<ol style="list-style-type: none"> <li>1. To be able to interpret the mortality and morbidity outcomes as rate, ratio and proportion</li> <li>2. To be able to perform regional/national/international health status comparisons using epidemiologic measures</li> <li>3. To be aware of that the noncommunicable diseases are important for the community health</li> <li>4. To be aware of that the communicable diseases are important for the community health</li> <li>5. To know the principles of health promotion</li> <li>6. To be aware of health systems of different countries</li> <li>7. To be able to determine the importance of the health and illness problems for the community</li> <li>8. To be able to create suggestions to resolve community health problems in Turkey and in the World</li> <li>9. To be able to design an epidemiologic study</li> <li>10. To be able to calculate the health parameters and the estimates according to the data of an epidemiologic study</li> <li>11. To be able to reading critically the epidemiologic studies</li> </ol>

	<p>12. Detecting the suitable statistical analysis for research data</p> <p>13. Application of the traditional statistical analysis techniques by SPSS software</p> <p>14. Interpretation of the statistical analysis results</p>
<b>References of the Course</b>	<p>1. Epidemiology For Public Health Practice, Editörler: Robert H. Firiis, Thomas A Sellers. Jones and Barlett Publishers, London,2009</p> <p>2. International Encyclopedia of Public Health. Elsevier Inc, 2008</p> <p>3. Biometry: The Principles and Practice of Statistics in Biological Research, Sokal R. R., Rohlf F. J., 3 rd edition, W. H. Freeman &amp; Co.</p> <p>4. Biostatistics, A Foundation For Analysis in the Health Sciences, Wayne W. D., John Wiley &amp; Sons,Inc., 1995.</p> <p>5. International Encyclopedia of Public Health. Elsevier Inc, 2008</p> <p>6. Oxford Textbook of Public Health, 4th Edition, 2</p> <p>7. Halk Sa ğ ı 1 Temel Bilgiler. Ça atay Güler, Levent Akın.2006, Hacettepe Üniversitesi Yayınları, Ankara</p> <p>8. Norton R.A, Hyder A, Gururaj G. International Public Health, Second Edition, Jones and Bartlett Publishers, London, 2006</p>
<b>Teaching and learning methods</b>	Theoretical
<b>Assessment</b>	Theoretical (%95), Medical English (%5)
<b>Language</b>	Turkish

**1. NAME OF THE COURSE:**

**EPIDEMIOLOGIC STUDIES**

**OVERVIEW:**

In this course, the epidemiologic study techniques are overviewed and field application is the main outcome of this course. The main topics covered by the class lessons are:

- Classification of the epidemiologic studies
- Observational and interventional studies
- Descriptive studies
- Cross-sectional studies
- Case-control studies
- Cohort studies
- Interventional studies
- Methodological studies
- Health Screening
- Study design and sampling
- Data sources in epidemiological studies and questionnaire forms
- Principles of data presentation, table and graphics

**2. LEVEL OF THE COURSE**

**a. Prerequisites of the Course:**

None

**Objectives of the Course:**

The aim of this course is to enable the students to plan, design, conduct and terminate successfully an Epidemiologic study.

**b. References of the Course:**

1. International Encyclopedia of Public Health. Elsevier Inc, 2008
2. Oxford Textbook of Public Health, 4th Edition, 2
3. Epidemiology For Public Health Practice, Editörler: Robert H. Firiis, Thomas A Sellers. Jones and Barlett Publishers, London,2009

4. Medical Epidemiology, Editörler: Greenberg RS, Daniels S, Flanders WD, Ele JW, Boring JR, Lange Medical Boks, 2001
5. Halk Sa lı ı Temel Bilgiler. Ça atay Güler, Levent Akın.2006, Hacettepe Üniversitesi Yayınları, Ankara
6. Norton R.A, Hyder A, Gururaj G. International Public Health, Second Edition, Jones and Bartlett Publishers, London ,2006

### **3. THE STATUS OF THE COURSE (COMPULSORY / ELECTIVE)**

Compulsory

### **4. TEACHING STAFF**

Prof. Dr. Ay e Akın  
Prof. Dr. Rengin Erdal  
Assist. Prof. Dr. Cihangir Özcan  
Assist. Prof. Dr Elif Durukan (PhD)  
Dr. Sare Mihçioğur (PhD)  
Dr. Nihal Bilgili Aykut (PhD)

### **5. LENGTH AND PERIOD**

This course consists of 18 hours in the 1<sup>st</sup> committee of the third year. Field application includes the half of the total course.

### **6. TEACHING AND LEARNING METHODS**

Class discussions, small group studies and case studies

### **7. ASSESSMENT**

Class participation and field application is a vital component of this course. Students are expected to attend classes regularly. Students will be evaluated according to their performance during class discussions and final examination.

### **8. LANGUAGE:**

The language of the course is Turkish.

### **9. LEARNING OUTCOMES :**

- To be able to design an epidemiologic study

- To be able to calculate the health parameters and the estimates according to the data of an epidemiologic study
- To be able to reading critically the epidemiologic studies

**1. NAME OF THE COURSE:**

**EPIDEMIOLOGY**

**2. OVERVIEW:**

The course is organized to provide a comprehensive introduction to principles of epidemiology and research methods to the third year students and to demonstrate them the relevance of epidemiology to all areas of public health endeavor. The main topics that cover this course are the followings:

- Introduction to epidemiology
- Community health measures
- Health statistics
- Registry and surveillance systems
- Communicable diseases epidemiology
- STD epidemiology
- Outbreak evaluation
- Nutritional epidemiology
- Non-communicable diseases epidemiology
- Tuberculosis epidemiology
- Community mental health epidemiology
- Cancer epidemiology
- Disaster epidemiology

**3. LEVEL OF THE COURSE**

**a. Prerequisites of the Course:**

None

**b. Objectives of the Course:**

The main objective of this course is to enable students to interpret and apply the principles of epidemiology to their own particular needs.

**c. References of the Course:**

1. International Encyclopedia of Public Health. Elsevier Inc, 2008
2. Oxford Textbook of Public Health, 4th Edition, 2

3. Epidemiology For Public Health Practice, Editörler: Robert H. Firiis, Thomas A Sellers. Jones and Barlett Publishers, London,2009
4. Medical Epidemiology, Editörler: Greenberg RS, Daniels S, Flanders WD, Ele JW, Boring JR, Lange Medical Boks, 2001
5. Halk Sa lı ı Temel Bilgiler. Ça atay Güler, Levent Akın.2006, Hacettepe Üniversitesi Yayınları, Ankara
6. Norton R.A, Hyder A, Gururaj G. International Public Health, Second Edition, Jones and Bartlett Publishers, London ,2006

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

Compulsory

#### **5.TEACHING STAFF**

Prof. Dr. Ay e Akın  
Prof. Dr. Rengin Erdal  
Assist. Prof. Dr. Cihangir Özcan  
Assist. Prof. Dr Elif Durukan (PhD)  
Dr. Sare Mihçioğur (PhD)  
Dr. Nihal Bilgili Aykut (PhD)

#### **6.LENGTH AND PERIOD**

This course consists of 20 hours lectures in the 1<sup>st</sup> committee of the third year.

#### **7.TEACHING AND LEARNING METHODS**

Class discussions, small group studies and case studies

#### **8.ASSESSMENT**

Class participation and field application is a vital component of this course. Students are expected to attend classes regularly. Students will be evaluated according to their performance during class discussions and final examination.

#### **9. LANGUAGE:**

The language of the course is Turkish.

**10.LEARNING OUTCOMES :**

- To be able to interpret the mortality and morbidity outcomes as rate, ratio and proportion.
- To be able to perform regional/national/international health status comparisons using epidemiologic measures

**1. NAME OF THE COURSE:**

**SOCIAL AND PREVENTIVE MEDICINE**

**2. OVERVIEW:**

This course provides students with a broad overview of some of the main philosophy and philosophical theories and ideas that are used as a basis for resolving debates of public health in the country and in the world. The course includes basic concepts of modern public health issues in the country and in the world. Main topics covered by this course are:

- Health reform in Turkey and in the world
- Health policy and problems
- National child health policies
- School health
- Reproductive health
- Occupational health and safety
- Environmental pollution
- Oral health and problems
- Aging and problems
- Health inequalities
- Disability
- Travel health
- Health promotion
- Food safety
- Ergonomics and health

**3. LEVEL OF THE COURSE**

**d. Prerequisites of the Course:**

none

**e. Objectives of the Course:**

The objective of this course is to learn and analyze the main public health concepts and principles.

**f. References of the Course:**

- Halk Sa Ğ lı ı Temel Bilgiler. Ća atay Gler, Levent Akın.2006, Hacettepe niversitesi Yayınları, Ankara
- Norton R.A, Hyder A, Gururaj G. International Public Health, Second Edition, Jones and Bartlett Publishers, London ,2006
- International Encyclopedia of Public Health. Elsevier Inc, 2008
- Oxford Textbook of Public Health, 4th Edition, 2

**4.THE STATUS OF THE COURSE (COMPULSORY / ELECT VE)**

Compulsory

**5.TEACHING STAFF**

Prof. Dr. Ay e Akın  
Prof. Dr. Rengin Erdal  
Assist. Prof. Dr. Cihangir zcan  
Assist. Prof. Dr Elif Durukan (PhD)  
Dr. Sare Mihćıokur (PhD)  
Dr. Nihal Bilgili Aykut (PhD)

**6.LENGTH AND PERIOD**

This course consists of 29 hours lectures in the 1<sup>st</sup> committee of third year.

**7.TEACHING AND LEARNING METHODS**

Class discussions, small group studies and case studies

**8.ASSESSMENT**

Class participation and field application is a vital component of this course. Students are expected to attend classes regularly. Students will be evaluated according to their performance during class discussions and final examination.

**9.LANGUAGE:**

The language of the course is Turkish.

## **10.LEARNING OUTCOMES :**

- To be aware of health systems of different countries
- To be able to determine the importance of the health and illness problems for the community
- To be able to create suggestions to resolve community health problems in Turkey and in the World.

## **BIostatistics**

### **1. DESCRIPTION:**

This course reviews some advanced statistical techniques

### **2. LEVEL:**

**a. Prerequisites:** None.

**b. Objectives:** The main objective of the course is to familiarize to students with parametric and nonparametric test,  $\chi^2$  test.

**c. References:**

1. Biometry: The Principles and Practice of Statistics in Biological Research, Sokal R. R., Rohlf F. J., 3 rd edition, W. H. Freeman & Co.
2. Biostatistics, A Foundation For Analysis in the Health Sciences, Wayne W. D., John Wiley & Sons, Inc., 1995.
3. Biyoistatistik, Kesici, T., Kocaba , Z., Ankara Üniversitesi Eczacılık Fakültesi Yayınları, 1998.
4. Biyoistatistik. Sümbülo lu, K., Sümbülo lu, V., Özdemir Yayıncılık, Ankara, 1995.
5. Introduction to Mathematical Statistics, Hogg, R., Craig, A., Macmillan Publishing Co., Inc., Toronto, 1970.
6. statisti e giri , kiz, F., Püskülcü, H., Eren, ., Ege Üniversitesi Basımevi, zmir, 1996.
7. statistik Metodları. Düzgüne ,O., Kesici,T., Gürbüz,F., A.Ü.Ziraat Fakültesi Yayınları, Ankara, 1983.
8. Research Methods in Physical Activity, Thomas, J. R., Nelson, J.K.
9. Statistics for Experimenters, An Introduction to Design, Data Analysis, and Model Building, Box, E.P.G., Hunter, G.W., Hunter, J. S., John Wiley & Sons, Inc., 1978.
10. Statistical Methods, Snedecor, G. W., Cochran, W. G., The Iowa State University Press, 1980.
11. Statistics with Applications to the Biological and Health Sciences, M. Anthony Schork, Richard D. Remington, Prentice Hall, 2000.

### **3. MANDATORY OR OPTIONAL COURSE:**

Mandatory course

**4. TEACHING STAFF:**

Assoc. Prof. Dr. Ersin Ö ü ,

Assoc. Prof. Dr. A.Canan Yazıcı

**5. LENGTH AND PERIOD:**

This course is a 12 hours course.

## **6. TOPICS:**

<b>Hours</b>	<b>Topics</b>
1,2	Repeat of Phase I topics, statistical tests
3,4	Tests for two independent samples, test for two dependent samples, SPSS application
5,6	Variance Analysis and Post-hoc test, Nonparametric test for the difference between two population means, SPSS application
7,8	Nonparametric test for the difference between two population means, SPSS application
9,10	Nonparametric one way analysis of variance, SPSS application
11,12	$\chi^2$ distribution, $\chi^2$ test, SPSS application

## **7. TEACHING AND LEARNING METHODS:**

The course will consist of lectures, class discussions, and computer applications.

## **8. ASSESSMENT:**

The coordination office through test examinations evaluates students.

## **9. LANGUAGE:**

The language of the course is Turkish

## **10. LEARNING OUTCOMES:**

- Detecting the suitable statistical analysis for research data
- Application of the traditional statistical analysis techniques by SPSS software
- Interpretation of the statistical analysis results

## **I. Identification of the course:**

### **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

#### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

#### **3. Level: 345**

##### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

##### **c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

#### **4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

**5. Teaching Staff**  
Selda Erdem Çekiç

**6. Length and Period**

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b> 08.09.-17-10 (12 hours)	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b> 20.10-01.12 (9 hours)	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b> 02.12. 26.12 (9 hours)	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b> 29-12-16.01 (9 hours)	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b> 02.02-04.03 12 hours	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b> 05.03-25.03 (6 hours)	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b> (9 hours) 26.03-21 April (9 hours)	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b> 22.04-12.05 (9 hours)	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b> 14.05-12-06 (9 hours)	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.

### **7. Teaching and Learning Methods**

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

### **8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

<b>Name</b>	2nd <sup>st</sup> Committee: BASIS OF DISEASES AND DIAGNOSTIC METHODS
<b>Status</b>	Compulsory
<b>ECTS credits</b>	11.1
<b>Responsibility</b>	Prof. Dr. Sedef Gökmen
<b>Prerequisite</b>	None
<b>Period</b>	6 weeks, 147 hours
<b>Content</b>	Basis of disease development, microbiologic and oncologic etiologies of diseases and pharmacologic therapy were the subjects of this course.
<b>Objectives</b>	<p>The objectives of this course are to better understand the structural and functional attributes of bacteria viruses and fungus that relate to their ability to live in intimate associations with humans, which includes their potential to produce infectious disease. Also understanding organ system infections diagnosis will give students another perspective. Practical exercises will be expert students in microbiological laboratory diagnoses.</p> <p>Pharmacology lectures familiarize students with the basic concepts of chemotherapy and with the preventive and therapeutic approaches for infectious diseases in terms of pharmacokinetic, pharmacodynamic, pharmacogenomic perspectives. Also, the course aims to focus on the pharmacoepidemiological and pharmacoconomical outcomes of antiinfective chemotherapeutics which are of importance for the country. The mechanisms of action, effects and adverse effects of the drugs are also discussed.</p>
<b>Learning Outcomes</b>	After the course the students will learn the basis mechanisms of disease. The student is expected to be able to discuss with others about the pharmacokinetic, pharmacodynamic properties of antiinfective chemotherapeutics used against bacterial, viral, fungal, protozoal and helminthic infections. The student is also expected to explain the general approach for the management of infectious diseases. Additionally, the student should describe the indications, action mechanisms and adverse effects of the drugs used in diagnosis.
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11. Basım, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.</li> <li>2. Hardman J.G. ve Limbird L.E. (editörler) 2006. Goodman &amp; Gilman's The Pharmacological Basis of Therapeutics, 11. Basım, McGraw-Hill, New York, A.B.D.</li> <li>3. Brooks GF, Butel JS, Morse SA (2008) "Jawetz, Melnick, &amp; Adelberg's Medical Microbiology", 24.th edition, McGraw-Hill Companies inc., USA</li> <li>4. Murray PR, Rosenthal KS, Kobayashi GS, Pfaller MA (2002) "Medical Microbiology", Fourth edition, Mosby Inc, Missouri USA</li> </ol>
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical (%87), Practice (% 8), Medical English (%5)
<b>Language</b>	Turkish

## NUCLEAR MEDICINE

### 1.DESCRPTION

This course reviews basic subjects in nuclear physics, radiation, the types of radiation, the biological effects of radiation, protection against radiation and most commonly performed nuclear medicine procedures

### 2.LEVEL

- a. **Prerequisite:** None
- b. **Objectives:** The objective of the course is to familiarize students with nuclear physics, radiation and nuclear medicine applications
- c. **References:**

#### Textbooks:

- 1) Görpe A., Cantez S. (1992). Pratik Nükleer Tıp, stanbul Tıp Fakültesi Vakfı
- 2) Essential of Nuclear medicine Imaging, Ed. Mettler FA, Guiberteau MJ, 3rd Edition, Saunders Company, 1991
- 3)Wilson AW. (1998). Textbook of Nuclear Medicine, Lippincott-Raven

### 3.MANDATORY OR OPTIONAL COURSE

This course is a mandatory course.

### 4.TEACHING STAFF

Prof.Dr.Ay e Akta

### 5.LENGTH AND PERIOD

This committee includes 1 hours of Nuclear Medicine Lecture. Topics to be covered are as follows:

SUBJECTS	
1- Nuclear Medicine	Basics of Nuclear Medicine

### 6. TEACHING AND LEARNING METHODS OF THE COURSE

lectures and class discussions

### 7. ASSESSMENT METHODS OF THE COURSE

### 8. THE LANGUAGE OF INSTRUCT ON

Turkish.

### 9. LEARNING OUTCOMES:

At the end of the module the student is expected to be able to:

- define radiation, the types and biological effects of radiation and basic nuclear medicine procedures.

## PHARMACOLOGY

### 1. IDENTIFICATION OF THE COURSE

#### PHARMACOLOGY: THE BASIS OF DISEASES AND DIAGNOSTIC METHODS

### 2. DESCRIPTION

This course reviews the therapeutic approach to infectious diseases. In particular, the course consists of theoretical pharmacology lectures dealing with the chemotherapeutics concept against infectious diseases, basic principles of chemotherapy, pharmacokinetic and pharmacodynamic properties of antibacterial, antiviral, antifungal, antiparasitic drugs, and their spectrum of action, mechanisms for drug resistance, adverse and toxic effects of these drugs. In addition, the course includes the lectures about the mechanisms of action, effects and adverse effects of the drugs used in diagnosis.

### 3. LEVEL

- a. Prerequisite:** None except for being successfully promoted from Phase II
- b. Objectives:** The first objective of the course is to familiarize students with the basic concepts of chemotherapy and with the preventive and therapeutic approaches for infectious diseases in terms of pharmacokinetic, pharmacodynamic, pharmacogenomic perspectives. Also, the course aims to focus on the pharmacoepidemiological and pharmaco-economical outcomes of anti-infective chemotherapeutics which are of importance for the country. The second objective is to teach the mechanisms of action, effects and adverse effects of the drugs used in diagnosis.
- c. Learning outcomes:** At the end of the course the student is expected to be able to discuss with others about the pharmacokinetic, pharmacodynamic properties of anti-infective chemotherapeutics used against bacterial, viral, fungal, protozoal and helminthic infections. The student is also expected to explain the general approach for the management of infectious diseases. Additionally, the student should describe the indications, action mechanisms and adverse effects of the drugs used in diagnosis.
- d. References:**
  1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.

2. Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.
3. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.
4. Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.
5. Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.
6. Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.
7. Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

#### **4. THE STATUS OF THE COURSE**

This course is a mandatory course

#### **5. TEACHING STAFF OF THE COURSE**

Meral Tuncer, MD, PhD (Professor of Pharmacology)

. Remzi Erdem, MD, PhD, (Professor of Pharmacology)

Müge Tecder-Ünal, MD, PhD (Assoc. Professor of Pharmacology)

Tolga Re at Aydos, MD, PhD (Assistant Professor of Pharmacology)

#### **6. THE PER OD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 6 weeks. Topics to be covered are as follows:

Lecture 1	General principles of antibiotic therapy
Lectures 2-3	Penicillins

Lecture 4-5	Cephalosporins
Lecture 6	Other Beta-lactam antibiotics
Lecture 7	Aminoglycosides
Lecture 8	Sulphonamides and co-trimoxazole
Lecture 9	Macrolides and tetracyclines
Lecture 10	Amphenicoles and Fluoroquinolones
Lecture 11	Drugs used in the chemotherapy of tuberculosis, syphilis and leprosy
Lecture 12	Lincosamides and narrow spectrum antibiotics
Lectures 13-15	Antiviral drugs
Lecture 16	Antiprotozoal drugs
Lecture 17	Antimalarial drugs
Lecture 18	Antihelminthic drugs
Lectures 19-20	Drugs used in diagnosis

## **7. TEACHING AND LEARNING METHODS**

PHARMACOLOGY consists of lectures and class discussions.

## **8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the PHARMACOLOGY course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

## **9. THE LANGUAGE OF INSTRUCTION:** The language of the course is Turkish.

## MICROBIOLOGY

1. **IDENTIFICATION:** Name: Microbiology, Basis of Diseases and Methods of Diagnosis
2. **DESCRIPTION:** This course reviews properties of bacteria viruses and fungus. Emphasis is placed on parasitic interactions between pathogenic bacteria viruses and fungus with humans. The first part of this course includes the properties of important pathogens, epidemiologic features of infections, the paradigms of host-bacterial interactions and diseases of humans. The second part of this course contains laboratory diagnosis of the organ systems infections.  
Special laboratory techniques to identify bacteria viruses and fungus and laboratorial approaches to diagnosis infectious disease by organ system will be practiced with experimental study to reinforce theoretical knowledge.
3. **LEVEL:**
  - a. **Prerequisite:**
  - b. **Objectives:** The objectives of this course are to better understand the structural and functional attributes of bacteria viruses and fungus that relate to their ability to live in intimate associations with humans, which includes their potential to produce infectious disease. Also understanding organ system infections diagnosis will give students another perspective. Practical exercises will be expert students in microbiological laboratory diagnoses.
  - c. **Learning outcomes:** Students will learn properties of infection agents.
  - d. **References**

### Textbooks

Brooks GF, Butel JS, Morse SA (2008) "Jawetz, Melnick, & Adelberg's Medical Microbiology", 24.th edition, McGraw-Hill Companies inc., USA

Murray PR, Rosenthal KS, Kobayashi GS, Pfaller MA (2002) "Medical Microbiology", Fourth edition, Mosby Inc, Missouri USA

Topçu AW, Söyletir G, Do anay M (2002) " nfeksiyon Hastalıkları ve Mikrobiyolojisi" Cilt1-2, Nobel Matbaacılık. Türkiye.,

Murray PR, Baron EJ, Pfaller MA Tenover FC, Yolk RH (2008) "Manual of Clinical Microbiology", 9.th edition, ASM Pres, Washington, USA

Mims C, Dockrell, Goering RV, Roitt I, Wakelin D, Zuckerman M (2004) "Medical Microbiology" Third edition, Mosby Inc, Missouri USA

Forbes BA, Sahm DF, Weissfeld AS (2008) "Bailey and Scott's Diagnostic Microbiology" 13.th Edition, Mosby Inc, Missouri USA

### Supplementary Reading List

<http://www.med.sc.edu:85/book/welcome.htm>

<http://gsbs.utmb.edu/microbook/toc.htm>

<http://www.textbookofbacteriology.net/>

## **4.COMPULSORY OR ELECTIVEL COURSE**

This course is a compulsory course

## 5. TEACHING STAFF

Prof. Dr. J. Sedef Göçmen  
Dr. Müge Ekici (Assoc. Prof. MD)  
Dr. Ebru Bostanoglu

## 6. LENGTH AND PERIOD

This course consists of 70 hours. Topics to be covered are as shown below;

Hours	Topics
1, 2, 3, 4	Gram positive coccus
5	Non spore forming Gram positive rods
6	Spore forming Gram positive rods
7	Gram negative coccus
8, 9, 10	Enterobacteriaceae
11, 12	Vibrio, Aeromonas, Plesiomonas
13	Campylobacter, Helicobacter
14, 15	Non-fermentative bacteria
16, 17	Haemophilus, Bordetella, Legionella
18, 19	Brucella, Pasteurella, Actinobacillus, Francisella
20, 21	Anaerobic bacteria
22, 23	Mycobacterium spp
24	Actinomyces, Nocardia, Rhodococcus
25	Treponema, Borellia, Leptospira
26	Mycoplasma, Ureaplasma
27	Chlamydiaceae
28	Ricketciaceae
29, 30, 31	Enveloped DNA viruses

32, 33	Naked DNA viruses
34, 35, 36, 37	Enveloped RNA viruses
38, 39	Naked RNA viruses
40, 41, 42	Hepatitis viruses
43,44	Retroviruses
45	Human cancer viruses
46	Slow viruses and Prions
47, 48	Superficial mycoses
49	Subcutaneous mycoses
50	Systemic mycoses
51, 52	Opportunistic mycoses
53, 54	Laboratory: Identification of Gram positive coccus
55, 56	Laboratory: Identification of Gram positive rods and Gram negative rods
57, 58, 59	Laboratory: Identification of Gram negative rods
60, 61, 62	Laboratory: Identification of Mycobacterium and anaerobes
63, 64	Laboratory: Mycological diagnostic techniques
65, 66, 67	Laboratory: Specimen collection, transport and microbiological methods I
68, 69, 70	Laboratory: Specimen collection, transport and microbiological methods II

## **7. TEACHING AND LEARNING METHODS**

The course will consist of lectures; laboratory courses and class discussions.

## **8. ASSESMENT**

The coordination office through test examinations evaluates students. Also laboratory practical examinations constructed.

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

**10. ECTS credit allocation**

**11. GLOSSARY**

## MEDICAL GENETICS

### 1. Identification: Medical Genetics

**2. Description:** After the completion of this lecture, students will have knowledge of clinic approach of genetic disease and genetic diagnosis

### 3. Level:

a. **Prerequisite:** None

b. **Objective:** To help the students understand the basic mechanisms of the genetic testing and the relations between these mechanisms during the clinical approach of genetic disorders.

c. **Learning outcomes:** We believe that this lecture will be helpful to give a brief overview on the basic concepts of clinical perspective of genetic disease and genetic diagnosis for student in earning to talent interpreting, comparing, distinguishing for to make appropriate and on time approach the genetic disease.

### d. References:

1. Lewis R., 2001 “Human Genetics, Concepts and Applications” Mc Graw Hill New York.
2. Nussbaum RL, McInnes RR, Willard HF, Thompson MW (2007) Thompson & Thompson genetics in medicine, 7th Edition. Philadelphia: Saunders/Elsevier.
3. Turnpenny P., Ellard S., 2007 “[Emery’s Elements of Medical Genetics](#)” 13th edition, Churchill Livingstone Elsevier.

**4. Compulsory or elective course units:** It is a compulsory course.

### 5. Teaching staff:

Prof. Dr. Feride ahin,

Assoc. Prof. Dr. Zerrin Yılmaz

**6. Length and period:** 4 hours in this committee:

<u>Hours</u>	<u>Topics</u>
1-2	The methods of genetic diagnosis
3-4	Introduction to clinical genetics

**7. Teaching and learning methods:** The course will consist of lectures and class discussions.

**8. Assessment:** The coordination office through test examinations evaluates students.

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

### 10. ECTS credit allocation

## CLINICAL ONCOLOGY

### 1. DESCRIPTION

Based on tumor biology and tumor kinetics, general principles of cancer treatment will be described.

### 2. LEVEL

- a. **Prerequisite:** None
- b. **Objectives:** The objective of the course is to describe tumor biology and kinetics to the students and subsequently in the light of this information general principles of cancer treatment and chemotherapeutics used in cancer and their mechanism of action will be discussed.
- c. **Learning outcomes:** At the end of the course, the student is expected to be able to understand general principles of cancer treatment based on tumor biology and kinetics.
- d. **References:**

#### Textbooks

1) DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology, Eighth Edition 978-0-7817-7207-5

2) Manual of Clinical Oncology Casciato DA, 6th Edition 2008

3) MD Anderson Manual of Medical Oncology by Hagop M. Kantarjian 2006

### 3. MANDATORY OR OPTIONAL COURSE

This course is a mandatory course.

### 4. TEACHING STAFF

Ozden Altundag, M.D. Assoc.Prof.

### 5. LENGTH AND PERIOD

This course includes 1 hours of lecture. Topics to be covered are as follows:

#### **Committee 1: Basis of disease and the methods of diagnosis**

Lecture 1	General principles of cancer treatment
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## **10. TEACHING AND LEARNING METHODS OF THE COURSE**

This course includes lectures, and class discussions

## **11. ASSESSMENT METHODS OF THE COURSE**

The students are responsible from al the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures

At the end of each committee each student will take multi-choice exam.

## **12. THE LANGUAGE OF INSTRUCTION**

Turkish.

## **PATHOLOGY**

### **1. Identification: PATHOLOGY**

**2. Description:** This course reviews basic subjects in pathology. After a brief overview of the course, the course deals with pathologic basis of all systems as well as immunologic and molecular and pathophysiologic mechanisms of diseases.

### **3. Level:**

- a. Prerequisite:** None
- b. Objectives:** The objective of the course is to familiarize students with the basic concepts and nomenclature in the pathology of the organs mentioned above and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms.
- c. Learning of outcomes:** At the end of the course, the student is expected to be able to understand general pathogenesis and morphology of inflammation, hemodynamic disorders and carcinogenesis.
- d. References:**

1) Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999

2) Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996

3) Anderson's Pathology; Eds. Damjanov I., Linder J; Tenth Edition, Mosby, 1996

4) Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992

### **4. Mandatory Or Optional Course:**

This course is a mandatory course.

### **6. Teaching Staff:**

Prof. Dr. Handan Özdemir

Dr. Eylem Akar

Dr. Ebnem Ayva

Dr. Ay en Terzi

**6. Length And Period:** This course includes 18 hours of pathology lectures. Topics to be covered are as follows:

**Committee 1: Basis of disease and the methods of diagnosis**

Lecture 1-3	Acute inflammation
Lecture 4-5	Chronic inflammation.
Lecture 6	The pathology of infectious diseases
Lecture 7	Tissue repair (cellular growth, fibrosis, tissue repair)
Lecture 8	Practice (acute-chronic inflammation, tissue repair)
Lecture 9	Amyloidosis and pathology of transplantation
Lecture 10	Neoplasia (definitions, nomenclature, biology of tumor growth)
Lecture 11	The role of pathology in diagnosis of cancer
Lecture 12	Carcinogenic agents
Lecture 13-14	Molecular basis of cancer
Lecture 15	Practice (neoplasia)
Lecture 16-18	Immune system diseases

**7. Teaching And Learning Methods Of The Course:** Third course includes lectures, class discussions and laboratory practises

**8. Assessment Methods Of The Course:** The students are responsible for all the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures. At the end of each committee each student will take multi-choice exam.

**9. The Language Of Instruction:** Turkish.

**10. ECTS credit allocation:**

# **RADIOLOGY**

## **1.IDENTIFICATION OF THE COURSE**

This course comprises main radiological diagnostic modalities and consist of the topics of “radiography (x-rays and mammography) and ultrasonography (US), computed tomography (CT), Magnetic Resonance Imaging (MRI) and angiography, under the name of committee “fundamentals of the diseases and diagnostic modalities”, programmed for the third year medical students.

## **2.LEVEL**

a)Prerequisite: Students are expected to be completed successfully of the second year classes and passed the exams.

b.Objectives: To familiarize the students with the basic concepts and momenclature in Radiology, to teach them indications, technique and clinical use of the radiological techniques, image interpretation and differential diagnostic criterions at the level of beginners

C.References:

-Magnetic Resonance Imaging of the Body. Higgins, CB, 3<sup>rd</sup> ed., Lippincott-Raven, Philadelphia. New York, 1996

-Computed Body Tomography with MRI correlation, Lee K.T.J, Lippincott-Raven, Philadelphia. New York, 1998

-Textbook of radiology and imaging. David Sutton, Churchill-Livingstone 2007

-Angiography: Vascular and interventional radiology. Baums, editor. Abrams Fourth edition, Boston, USA: Little, Brown, 1997

## **3. MANDATORY OR OPT ONAL COURSE**

This course is a mandatory course

## **4. TEACH NG STAFF**

Emin A Niron, M.D. Prof.of Radiology

Mehmet Co kun, M.D. Prof.of Radiology

## **5.LENGTH AND PER OD**

This course consist of 4 (four), 50 minute classes

## **SUBJECTS**

- 1.Direct x-ray techniques and ultrasound (US), Emin A.Niron, M.D.
- 2.Computed Tomography (CT), Mehmet Co kun, M.D.
- 3.Magnetic Resonance Imaging (MRI), Ça la Tarhan, M.D.
- 4.Angiography, Fatih Boyvat, M.D.

## **6.TEACHING AND LEARNING METHOD OF THE COURSE**

These courses includes lectures and class discussions, without laboratory practises

## **7.THE LANGUAGE OF INSTRUCTIONS**

Turkish

# **PEDIATRIC ONCOLOGY**

## **1. IDENTIFICATION OF THE COURSE**

Pediatric Oncology: Phase III, The Biological Basis of Diseases and Diagnostic Procedures Committee and Hematopoietic System, Oncology and Immunology Committee  
Pediatric Oncology Lectures;

1. Tumor Immunology
2. The Biology of Tumor Metastasis
3. General Characteristics of Pediatric Tumors
4. Pediatric Lymphomas
5. Pediatric Solid Tumors

## **1. COURSE DESCRIPTION**

The aims of the course are to give the basic knowledge of tumor immunology and tumor metastasis in the first committee named The Biologic Basis of Diseases and Diagnostic Procedures. In the 4th Committee of Phase III, Hematopoietic System, Oncology and Immunology, aims of the courses are to give epidemiologic characteristics, etiology, and pathology of pediatric tumors according to the logical basis of integrated medical education.

## **2. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is for phase III students. All students are required to have successfully completed Phase II. Theoretical lectures and laboratory practice of anatomy, histology-embryology, and physiology have to be completed.

## **3. OBJECTIVES OF THE COURSE**

At the end of the course, the students are expected to be able to do the following according to the main subjects;

1. **Tumor immunology:** A summary of basic principles of immunology, tumor antigens, humoral immune response to cancer, cellular immune response to cancer, immunological diagnosis of cancers, humoral immunotherapy in cancer, cellular immunotherapy in cancer, tumor vaccines, anti-angiogenic therapy.

2. **The biology of tumor metastasis:** The clinical importance of tumor metastasis, the main steps of cancer metastasis, cell to cell adesion molecules, tumor angiogenesis, cellular invasion, lysis of extracellular matrix, adesion to extracellular matrix proteins intravasation, extravasation, angiogenesis in the metastatic focus, tissue-specific metastatis, multistep carcinogenesis.
3. **The basic characteristics of pediatic cancers:** epidemiology of pediatic cancers, etiology of pediatic cancers, basic differences between pediatic and adult cancers, clinical characteristics, basic principles of staging of pediatic cancers, general principles of pediatic cancer therapy, prognosis.
4. **Pediatic lymphomas:** The epidemiology, etiology, pathology, clinical characteristics, staging, therapeutic principles, prognostic factors of pediatic Hodgkin's lymphomas and pediatic non-Hodgkin's lymphomas.
5. **Pediatic solid tumors:** The epidemiology, etiology, pathology, clinical characteristics, staging, therapeutic principles, prognostic factors of main pediatic tumors including CNS tumors, neuroblastoma, renal tumors, soft-tissue sarcomas, bone sarcomas, germ-cell tumors, retinoblastoma.

#### **4. REFERENCES**

1. Pizzo PA, Poplack DG (eds). Principles and Practice of Pediatric Oncology, 5th Ed. Lippincott Williams & Wilkins, Philadelphia 2006.
2. UICC Klinik Onkoloji, Sarialio lu F, Kutluk T, Yalçın B, Güne D. (çeviri editörleri). Türk Kanser Ara tırma ve Sava Kurumu, Ankara 2007.
3. Pediatri, Yurdakök M.(çeviri editörü). Güne Kitabevi, Ankara 2007. Kısım 4J: Kanser.

#### **4. TEACING STAF**

Faik Sarialio lu, M.D. Professor of Pediatrics and Pediatric Oncology

#### **5. THE PROPERTIES OF THE COURSE**

The course is composed of seven (4 hour in the II. Committee, and 3 hour in the V. Committee) 50-minute lectures

#### **6. THE LANGUAGE OF THE COURSE**

Turkish

## **I. Identification of the course:**

### **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

#### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

#### **3. Level: 345**

##### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

##### **c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

#### **4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

## 5. Teaching Staff

Selda Erdem Çekiç

## 6. Length and Period

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b>	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b>	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b>	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b>	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b>	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b>	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b>	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b>	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b>	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and

	causative structures.
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### **7. Teaching and Learning Methods**

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

### **8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

<b>Name</b>	3rd Committee: CIRCULATORY AND RESPIRATORY SYSTEMS
<b>Status</b>	Compulsory
<b>ECTS credits</b>	8,8
<b>Responsibility</b>	Assoc Prof. Dr. L. Elif SADE
<b>Prerequisite</b>	None
<b>Period</b>	6 weeks, 137 hours
<b>Content</b>	In this course the students were informed about the diseases of circulatory and respiratory system, the mechanisms of disease development, diagnostic and therapeutic methods as well as disease prevention.
<b>Objectives</b>	The objective of the course is to familiarize students with the basic concepts of heart, vessel and lung diseases, physical signs and symptoms of disease and therapeutic approaches.
<b>Learning Outcomes</b>	<p>The students will be able to;</p> <p>Determine the appropriate diagnostic tests in cardiology and respiratory diseases and their interpretation</p> <p>Diagnose heart failure and valvular heart diseases if provided with essential clinical and laboratory findings and plan basic therapy based on these findings, Inform his/her environment about the pathogenesis and risk factors for atherosclerosis and coronary heart disease and learn how to approach a patient with myocardial infarction, determine if an individual has hypertension based on blood pressure measurements and plan basic tests to evaluate hypertension if the individual is hypertensive</p> <p>At the end of the course, the student is expected to be able to understand general pathogenesis and morphology of heart, vessel and lung diseases and is expected to be able to discuss on the functions of the autonomous nervous system, related receptors and post-receptor signal transduction pathways, and therapeutic approach to the cardiovascular and respiratory diseases with others. The students should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse effects of the drugs used for the management of cardiovascular and respiratory diseases.</p>
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, 8th ed. 2007 Saunders</li> <li>2. Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W.B. Saunders Company, 1999</li> <li>3. Keane JF, Fyler DC, and Lock JE (Eds). Nadas Pediatric Cardiology , 2nd Edition 2006 Saunders Elsevier</li> <li>4. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11. Basım, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.</li> <li>5. Hardman J.G. ve Limbird L.E. (editörler) 2006. Goodman &amp; Gilman's The Pharmacological Basis of Therapeutics, 11. Basım, McGraw-Hill, New York, A.B.D.</li> </ol>

	6. Clinical Respiratory Medicine. 2nd ed. Albert R, Spiro S, Jett J. Mosby, Philadelphia, 2004.
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical (%95), Medical English (%5)
<b>Language</b>	Turkish

## ANESTHESIOLOGY

### 1. IDENTIFICATION OF THE COURSE

Anesthesiology- Grade III, Anesthesiology lectures in 'Circulatory & Respiratory Systems' committee.

### 2. Course Description

Invasive and noninvasive cardiac and respiratory system monitorization techniques, indications, contraindications, and complications of each technique are discussed in the course. The mechanism of gas diffusion, oxygen, and carbon dioxide transport are emphasized. Clinical measurements of arterial blood gases and their interpretation are also discussed.

### 3. Level of the Course

#### a. Prerequisites of the Course:

This course is only for the third year medical students and will be given during the 'Circulatory & Respiratory Systems' committee. All the students are expected to complete the second year in medical faculty successfully which they took lectures on the anatomy and physiology of the circulatory system.

#### b. Objectives and Learning outcomes of the Course:

To review and familiarize students with the basic monitorization techniques and interpretation of arterial blood gases at the end of the course.

#### c. References of the Course:

1. Morgan GE, Mikhail MS, Murray MJ. (2006). Clinical Anesthesiology, USA: Mc Graw Hill.
2. Zeynep Kayhan. (2004). Klinik Anestezi, Logos Yayıncılık, İstanbul.
3. Marino PL. (2007). The ICU Book, Lippincott Williams & Wilkins.
4. Barash PG, Cullen BF, Stoelting RK. Clinical Anesthesia. (2006), Lippincott Williams & Wilkins.
5. Miller RD. Miller's Anesthesia. (2005), Elsevier Churchill Livingstone.

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

This course is a mandatory course.

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

Adnan Torgay, M.D, Professor

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

This course is a one-semester course consisting 7 weeks. Topics to be covered are as follows:

1. Respiratory and circulatory monitorization
2. Blood Gases
7. Teaching and Learning Methods of the Course

The course will consist of lectures.

8. Assessment Methods and Grading of the Course

Class participation is a vital component of this course. Students are expected to attend classes regularly. Students are encouraged to make extra readings from the above mentioned textbooks to be ready to participate to class discussions. There will be exam that covers all topics at the end of the course.

9. The Language of Instruction

Turkish.

10. ECTS Credit Allocation

## **PEDIATRIC SURGERY**

### **IDENTIFICATION OF THE COURSE**

Pediatric Surgery: Phase III Respiratory and Cardiovascular Systems Subject Committee, Pediatric Surgery Lectures; “Respiratory System Anomalies, Congenital Diaphragmatic Hernia”

### **COURSE DESCRIPTION**

Included in the Respiratory and Cardiovascular Systems subject committee; the lectures aim to give the basic information on diseases of respiratory system to the students. Diagnostic tools, clinical management and treatment of congenital respiratory anomalies and acquired surgical diseases at pediatric age are told.

### **LEVEL AND PREREQUISITES OF THE COURSE**

This lecture is for only phase III students of medical faculty and is included in the Respiratory and Cardiovascular Systems subject committee.

All students are required to have successfully completed phase II; during which, respiratory and cardiovascular embryology, anatomy and physiology are taught.

### **OBJECTIVES OF THE COURSE:**

At the end of this course, the students are expected to be able to do the following:

1. Decide the diagnostic tools to be used according to physical examination findings of a case presenting with congenital respiratory complaints and evaluate their results.
2. Have enough information about; congenital lobar emphysema, congenital cystic adenomatoid malformation, bronchogenic cyst, pulmonary sequestration, congenital diaphragmatic hernia, diaphragmatic eventration, pneumothorax in differential diagnosis.
3. Know emergent interventional necessities, diagnostic procedures and transportation precautions for patients admitting with respiratory distress.
4. Briefly inform the parents on diseases mentioned and their prognosis.
5. Decide the appropriate institution for further treatment and transport the patient properly.

### **REFERENCES OF THE COURSE**

1. Bebek ve Çocukların; Cerrahi ve Ürolojik Hastalıkları, 2006, Palme Yayıncılık
2. Pediatric Surgery, 6<sup>th</sup> Edition, 2006, Mosby.

3. Jones'Clinical Paediatric Surgery: Diagnosis and Management, Sixth Edition, 2008, Blackwell Publishing
4. Katkı Pediatri Dergisi, Çocuk Cerrahisi I-II, 2004, Cilt:26, Sayı:4-5
5. Published lecture notes

**NAME OF THE TEACHING STAFF OF THE COURSE**

brahim ÖTGÜN, M.D, Asist Prof.

**THE PROPERTIES OF THE COURSE**

The course is composed of 2(two) theoretical lectures of 50 minutes each.

**THE LANGUAGE OF THE COURSE**

Turkish

## **PEDIATRIC CARDIOLOGY**

### 1. IDENTIFICATION OF THE COURSE

Pediatric Cardiology – Pediatric Cardiology lectures in “Circulatory and Respiratory Systems” Committee

### 2. COURSE DESCRIPTION

Pediatric Cardiology course for the third year medical students aims to give the fundamental information about heart diseases in infants and children. The initial lectures will cover cardiac physiology, symptoms and signs of heart disease. Lectures about laboratory tests used in diagnosis and follow-up of cardiac disease and indications of these tests will follow. Lastly congenital and acquired heart diseases in infants and children will be discussed including etiology, clinical findings and treatment.

### 3. LEVEL AND PREREQUISITES OF THE COURSE

This course is only for the third year medical students and will be given during the “Circulatory and Respiratory Systems” Committee. All the students are expected to complete the second year in the medical faculty successfully which they took the lectures on the anatomy and physiology of the circulatory system.

### 4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE

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

- recognize the symptoms and signs of heart disease in infants and children, to make differential diagnosis of main groups of congenital heart disease with patient history and physical examination. For ex: cyanotic heart disease vs left-to-right shunt lesions
- diagnose heart failure in infants and children and plan the basic therapy.
- to suspect duct-dependent lesions presenting in the newborn period
- define criteria of the acute rheumatic fever and to make differential diagnosis.
- Approach a child with syncope
- To recognize clinical conditions which have to be referred to tertiary centers and to know the emergency measures to take.

## 5. REFERENCES OF THE COURSE

- a. Garson A, Bricker JT, McNamara PG (Eds) The Science and Practice of Pediatric Cardiology , 2nd Edition. 1990, Williams and Wilkins, Philadelphia
- b. Kliegman RM, Behrman RE, Jenson HB (Eds). Nelson Textbook of Pediatrics, 2007 WB Saunders, Philadelphia
- c. Keane JF, Fyler DC, and Lock JE (Eds). Nadas Pediatric Cardiology , 2nd Edition 2006 Saunders Elsevier

## 6.TEACHING STAFF

Birgöl Varan, MD, Professor  
İlkay Erdoğan, MD, Assistant Professor

## 7.FEATURES OF THE COURSE

The course consists of 12 50-minute lectures with no laboratory applications

## 8.LANGUAGE OF THE COURSE

Turkish

## **INFECTIOUS DISEASES**

### **1. IDENTIFICATION OF THE COURSE**

#### **INFECTIOUS DISEASES**

### **2. COURSE DESCRIPTION**

Two lessons entitled “Etiologic agents of myocarditis, pericarditis and infective endocarditis” and “Upper respiratory tract infections” are presented in the Circulatory and Respiratory Systems Committee for the third year medical students.

### **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for the third year medical students and given during the Circulatory and Respiratory System Committee. All the students are expected to complete the second year in the medical faculty successfully.

### **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

**At the end of the “Etiologic agents of myocarditis, pericarditis and infective endocarditis” lesson, students are expected to be able to:**

1. To learn the etiologic agents of myocarditis, pericarditis and infective endocarditis,
2. To determine the tests (complete blood count, blood chemistry, acute phase reactants, serologic tests, electrocardiography, echocardiography and other laboratory or imaging tests when needed) required to diagnose myocarditis, pericarditis and infective endocarditis definitely,
3. To manage the diagnostic procedures and tests to determine the etiologic agent definitely.

**At the end of the “Upper respiratory tract infections” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis of upper respiratory tract infections according to clinical symptoms and signs,
2. To determine the tests (throat culture, complete blood count, blood smear, blood chemistry and other laboratory or imaging tests when needed) required to diagnose which upper respiratory tract infection definitely,

3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

## **5. REFERENCES OF THE COURSE**

1. Principles and Practice of Infectious Diseases

Gerald L.Mandell, John E. Bennett, Raphael Dolin

2. Infectious Diseases

Jonathan Cohen, William G. Powderly

3. enfeksiyon Hastalıkları

Ay e Willke Topçu, Güner Söyletir, Mehmet Do anay

## **6. TEACHING STAFF**

Haluk Erdo an, MD, Assistant Proffessor

Ziya Demiro lu, MD, Assistant Proffessor

## **7. FEATURES OF THE COURSE**

This course consists of two lectures entitled “Etiologic agents of myocarditis, pericarditis and infective endocarditis” and “Upper respiratory tract infections” with no laboratory applications. The duration of each lecture is 50 minutes.

## **8. THE LANGUAGE OF INSTRUCTION**

Turkish

# **PHARMACOLOGY**

## **1. IDENTIFICATION OF THE COURSE**

### **CIRCULATORY AND RESPIRATORY SYSTEMS (COMMITTEE 3)**

## **2. DESCRIPTION**

This course reviews the therapeutic approach to cardiovascular and respiratory diseases. It also consists of theoretical and practical pharmacology lectures about the basic principles of treatment in cardiovascular and respiratory diseases with the pharmacokinetic and pharmacodynamic properties, and adverse effects of the related drugs. In particular, the course focuses on autonomic nervous system pharmacology, drugs affecting the systems regulating blood pressure, coagulation and lipid metabolism. In addition, the course includes the practical lessons on cardiovascular system pharmacology.

## **3. LEVEL**

- a. **Prerequisite:** None except for being successfully promoted from Phase II
- b. **Objectives:** The course aims to familiarize the students with the importance of the medical (pharmacological) approach in the management (preventive, therapeutic) of the cardiovascular and respiratory diseases and with the pharmacokinetic, pharmacodynamic, pharmacogenomic aspects for the relevant drugs, in addition to the pharmacoepidemiological and pharmaco-economic approach to the cardiovascular and respiratory disease treatment strategies. The first objective of the course is to familiarize students with the autonomic nervous system functions and related therapeutics. The second objective is to teach the drugs used in cardiovascular and respiratory system diseases.
- c. **Learning outcomes:** At the end of the course the student is expected to be able to discuss on the functions of the autonomous nervous system, related receptors and post-receptor signal transduction pathways, and therapeutic approach to the cardiovascular and respiratory diseases with others. At the end of the PHARMACOLOGY course, the students should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse effects of the drugs used for the management of cardiovascular and respiratory diseases. In addition, at the end of the practical lessons (with computer-based experiment simulations) the student

is expected to answer the basic cardiovascular pharmacology questions on the experimental animal models.

**d. References**

1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.
2. Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.
3. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.
4. Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.
5. Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.
6. Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.
7. Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

**4. THE STATUS OF THE COURSE** This course is a mandatory course

**5. TEACHING STAFF OF THE COURSE**

Meral Tuncer, MD, PhD (Professor Doctor)

. Remzi Erdem, MD, PhD (Assoc. Professor of Pharmacology)

Müge Tecder-Ünal, MD, PhD (Assoc. Professor of Pharmacology)

Tolga Re at Aydos, MD, PhD (Assistant Professor of Pharmacology)

**6. THE PER OD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 6 weeks. Topics to be covered are as follows:

Lectures 1-2	Introduction to autonomic nervous system pharmacology
Lecture 3	Receptors in autonomic nervous system
Lectures 4-5	Sympathetic nervous system and sympathomimetic drugs
Lecture 6	Sympatholytic drugs
Lectures 7-8	Parasympathic nervous system and parasympathomimetic drugs
Lecture 9	Parasympatholytic drugs
Lecture 10	Treatment of mycetism and intoxication with organophosphates
Lecture 11	Ganglion stimulating - blocking drugs and nicotine
Lecture 12	Cardiac glycosides
Lectures 13-14	Other drugs used in heart failure
Lectures 15-16	Renin-Angiotensin system pharmacology
Lecture 17	Diuretic drugs
Lecture 18	Antianginal drugs and other coronary vasodilators
Lecture 19	Calcium channel blockers
Lectures 20-21	Antihypertensive drugs
Lecture 22	Peripheral vasodilators
Lecture 23	Antiarrhythmic drugs
Lecture 24	Hypolipidemic drugs
Lecture 25	Antithrombotic and fibrinolytic drugs
Lectures 26	Bronchodilator drugs
Lecture 27	Antitussive and expectorant drugs

## 7. TEACHING AND LEARNING METHODS

PHARMACOLOGY course will consist of lectures and class discussions

## **8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the PHARMACOLOGY course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

9. **THE LANGUAGE OF INSTRUCTION:** The language of the course is Turkish.

## **PULMONARY DISEASES**

### **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 immunologic 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 immunologic, 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) Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999

2) Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

Füsün Eyübo lu, M.D. Prof.

Uğur Akçay, M.D. Prof.

Gaye Ulubay, M.D. Assoc. Prof.

Elif Küpeli, M.D. Assistant Prof.

erife Bozba , M.D. Assistant Prof.

## 5. LENGTH AND PERIOD

This course includes 11 hours of lectures. Topics to be covered are as follows:

### Committee 2: Respiratory and Vascular Diseases

Lesson 1	Anatomy of the respiratory system
Lesson 2	Physiology of the respiratory system
Lesson 3	History taking and semptomatology of the respiratory system
Lesson 4	Physical examination of the respiratory system
Lesson 5	Asthma
Lesson 6	Chronic obstructive pulmonary disease
Lesson 7	Interstitial lung diseases
Lesson 8	Pulmonary thromboemboli
Lesson 9	Pulmonary airway diseases other than asthma and COAH
Lesson 10	Tuberculosis
Lesson 11	Pneumonia

## 6. TEACHING AND LEARNING METHODS OF THE COURSE

This course includes lectures, class discussions and laboratuary practises

## 7. THE LANGUAGE OF INSTRUCTION

Turkish.

## **OTOLARYNGOLOGY HEAD AND NECK SURGERY**

### **1. IDENTIFICATION OF THE COURSE**

### **2. DESCRIPTION**

Basic information on the disorders of the ear, nose, paranasal sinuses, oral cavity, pharynx, larynx and neighbouring structures, emergencies and imaging modalities are reviewed.

### **3. LEVEL**

**a. Prerequisites:** None.

**b. Objectives:** The objective of the course is to teach the students the basic knowledge of anatomy and physiology of the structures of otolaryngology head and neck surgery, and aetiology, symptomatology, diagnosis and treatments of the pathologies of this region as well.

**c. Learning Outcomes:** The students should learn the basic concepts of otolaryngology head and neck surgery that they can use during their professional life as General Practitioners.

**d. References:**

#### Textbooks:

1. Cummings CW, Frederickson JM, Harker LA, Krause CJ, Richards MA, Schuller DE. (1998) *Otolaryngology Head and Neck Surgery*, Mosby, St. Louis Missouri.
2. Paparella MM, Shumrick DA, Gluckmann JL, Meyerhoff WL (1991) *Otolaryngology*, WB Saunders, Philadelphia.
3. Çelik O. (2002) *Kulak Burun Bo az Hastalıkları ve Ba Boyun Cerrahisi*, Turgut Yayıncılık, İstanbul.
4. Kaya S (2002) *Larenks Hastalıkları*, Bilimsel Tıp, Ankara.
5. Brackmann DE, Shelton C., Arriaga MA (1994) *Otologic Surgery*, WB Saunders Comp, Philadelphia.
6. Lore JM (1988) *Atlas of Head and Neck Surgery*, WB Saunders Comp, Philadelphia.

#### Articles:

1. Baloh RW.: Prosper Meniere and his disease. *Arch Neurol* 2001;58:1151-6.
2. Balkany T., Pillsbury H., Arenberg IK.: Defining and quantifying Meniere's Disease. *Otolaryngologic Clinics of North America*. 1980; 13: 589-595.
3. Fraysse B., Alonso A., House W. : Meniere's disease and endolymphatic hydrops: clinical-histopathological correlations. *Annals of Otology Rhinology and Laryngology*. 1980; 89 (Suppl 76) 2-22.
4. Atlas MD, Vhai F., Boscato L.: Meniere's disease: evidence of an immune process. *Am J Otol*. 1998; 19:628-631.
5. Derebery MJ., Valenzuela S.: Meniere's syndrome and allergy. *Otolaryngologic clinics of North America*. 1992; 25:213-224.
6. Hannely MT. Audiologic characteristics of the patient with otosclerosis. *Otolaryngologic clinics of North America*. 1993; 26:373-387.
7. Lucente FE: Fungal infections of the external ear. *Otolaryngologic clinics of North America*. 1993; 26:995-1006.
8. Darrow D:H., Dash N., Derkay C.S; Otitis media: concepts and controversies. *Curr Opin Otolaryngol* 2003;11:416-423.
9. McWhorter A.J.; Tracheotomy: timing and techniques. *Curr Opin Otolaryngol* 2003;11:473-479.
10. Perkins JA. Medical and surgical management of otitis media in children. *Otolaryngol Clin North Am*. 2002;35:811-25.
11. Weber SM, Grundfast KM. Modern management of acute otitis media. *Pediatr Clin North Am*. 2003;50:399-411.
12. Go C, Bernstein JM, de Jong AL, Sulek M, Friedman EM. Intracranial complications of acute mastoiditis. *Int J Pediatr Otorhinolaryngol*. 2000 15;52:143-8.
13. Levin R, Trivikram L. Cost/benefit analysis of open tracheotomy, in the or and at the bedside, with percutaneous tracheotomy. *Laryngoscope*. 2001;111:1169-73.
14. McQuone SJ. Acute viral and bacterial infections of the salivary glands. *Otolaryngol Clin North Am*. 1999;32:793-811.
15. Benecke JE Jr. Facial paralysis. *Otolaryngol Clin North Am*. 2002;35:357-65.
16. Shindo M. Management of facial nerve paralysis. *Otolaryngol Clin North Am*. 1999;32:945-64.

17. Stankiewicz JA. Nasal endoscopy and control of epistaxis. *Curr Opin Otolaryngol Head Neck Surg.* 2004;12:43-5.
18. Epley JM. Particle repositioning for benign paroxysmal positional vertigo. *Otolaryngol Clin North Am.* 1996;29:323-31.
19. Hirano M. Surgical anatomy and physiology of the vocal folds. In Gould WJ, Sataloff RT, Spiegel JR, *Voice Surgery* St Louis, Mosby , 1993; pp135-158.
20. Brandenburg MP, Kirkham W, Koschke D: Vocal cord augmentation with autogenous fat *Laryngoscope* 1992; 102:495-500.
21. Choi ss, Cotton RT: Surgical management of voice disorders. *Pediatr Clin North Am* 1989; 36:1535-1549.
22. Ferlito A: Malignant laryngeal epithelial tumors and lymph node involvement: therapeutic and prognostic considerations. *Ann Otol Rhinol laryngol* 1987;96:542.
23. Jones SR, Myers EN, Barnes L: Benign neoplasms of the larynx, *Otolaryngol Clin North Am* 1984;17:151.
24. Kasperbauer JL, Kern EB. Nasal valve physiology. Implications in nasal surgery. *Otolaryngol Clin North Am.* 1987 Nov;20(4):699-719.
25. Knops JL, McCaffrey TV, Kern EB. Inflammatory diseases of the sinuses: physiology. Clinical applications. *Otolaryngol Clin North Am.* 1993 Aug;26(4):517-34.
26. Brintjes TD, van Olphen AF, Hillen B, Huizing EH. A functional anatomic study of the relationship of the nasal cartilages and muscles to the nasal valve area. *Laryngoscope.* 1998 Jul;108(7):1025-32.
27. Benninger MS, Ferguson BJ, Hadley JA, Hamilos DL, Jacobs M, Kennedy DW, Lanza DC, Marple BF, Osguthorpe JD, Stankiewicz JA, Anon J, Denny J, Emanuel I, Levine H. Adult chronic rhinosinusitis: definitions, diagnosis, epidemiology, and pathophysiology. *Otolaryngol Head Neck Surg.* 2003 Sep;129(3 Suppl):S1-32.
28. 2. Anon JB, Jacobs MR, Poole MD, Ambrose PG, Benninger MS, Hadley JA, Craig WA; Sinus And Allergy Health Partnership. Antimicrobial treatment guidelines for acute bacterial rhinosinusitis. *Otolaryngol Head Neck Surg.* 2004 Jan;130(1 Suppl):1-45.
29. He J, Kryger MH, Zorick FJ, et al. Mortality and apnea index in OSAS. *Chest* 1988;94:9.
30. Kaplan J, Staats BA. OSAS. *Mayo Clin Proc* 1990;65:1087.

31. Meredith GM. Airway and dentofacial development. Am J Rhinol 1988;2:33.

#### **4. MANDATORY OR OPTIONAL COURSE**

These lectures are mandatory.

#### **5. TEACHING STAFF**

Seyra Erbek (Assoc. Prof. Dr.),

Fuat Buyuklu (Assoc. Prof. Dr.),

#### **6. LENGTH AND PERIOD**

The courses will be held in 3 hours. The topics of the courses are as follows.

1. Upper respiratory tract obstruction and tracheotomy
2. Epistaxis, smell and taste
3. Otitis media

#### **7. TEACHING AND LEARNING METHODS**

The courses will be held as lectures.

#### **8. ASSESSMENT**

Students will be responsible from all of the textbooks mentioned and handout notes. Students are encouraged to make extra readings. Students are expected to attend classes regularly. Each student will be evaluated according to his/her performance during daily educative applications. There will be a written final exam which will cover all of the topics mentioned above.

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

## **PATHOLOGY**

### **1. DESCRIPTION**

This course deals with pathologic basis of cardiovascular and lung diseases as well as immunologic 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 the pathology of heart, vessel and lung diseases and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms.

**c.Learning of outcomes:** At the end of the course, the student is expected to be able to understand general pathogenesis and morphology of heart, vessel and lung diseases.

**d.References:**

- a. Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999
- b. Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992
- c. Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996
- d. Anderson's Pathology; Eds. Damjanov I., Linder J; Tenth Edition, Mosby, 1996

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

Handan Özdemir, M.D. Prof.

Ay en Terzi, M.D.

Ebru Demiralay, M.D.

Merih Tepeo lu, M.D

## 5. LENGTH AND PERIOD

This course includes 16 hours of lectures. Topics to be covered are as follows:

### Committee 2: Blood vessels, heart and respiratory system

Lecture 1	Valvular heart disease.
Lecture 2-4	Atherosclerosis, ischemic-hypertensive heart disease, myocardial infarction .
Lecture 5	Cardiomyopathy, myocardit, heart neoplasm
Lecture 6.	Pericardial pathology
Lecture 7	Vessel neoplasm
Lecture 8	Vasculitis
Lecture 9-12	Chronic obstructive, restrictive, diffuse interstitial, vascular, infectious lung disease
Lecture 13	Lung tumours and pleural disease.
Lecture 14	The pathology of larynx diseases.
Lecture 15-16	Laboratory session of heart, lung, pleural disease

## 8. TEACHING AND LEARNING METHODS OF THE COURSE

This course includes lectures, class discussions and laboratuary practises

## 9. ASSESSMENT METHODS OF THE COURSE

The students are responsible from al the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures. At the end of each committee each student will take multi-choice exam.

## 10. THE LANGUAGE OF INSTRUCTION

Turkish.

## **RADIOLOGY**

### 1. IDENTIFICATION OF THE COURSE

Radiology - Radiology lectures in “Circulatory and Respiratory Systems” committee

### 2. COURSE DESCRIPTION

Radiology course for third year medical students aims to give the fundamental information about the radiological imaging methods in the diagnosis of circulatory and respiratory disease.

### 3. LEVEL AND PREREQUISITES OF THE COURSE

This course is only for third year medical students and will be given during the “Circulatory and Respiratory Systems” committee. All the students are expected to complete the second year in the medical faculty successfully which they took lectures on the anatomy and physiology of the circulatory and respiratory systems.

### 4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE

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

- determine the appropriate radiological examination in the diagnosis of respiratory and cardiovascular system diseases
- diagnose pathological patterns of chest X-ray
- learn normal radiological anatomy of cardiovascular system
- learn normal radiological anatomy of respiratory system
- make differential diagnosis depending on the radiological images

### 5. REFERENCES OF THE COURSE

- Textbook of Radiology and Imaging, David Sutton, 7ed, Churchill Livingstone, 2002
- Klinik Radyoloji, Ercan Tuncel, Güne & Nobel Kitabevi, 1994

### 6. TEACHING STAFF

Fatih Boyvat, M.D., Professor

Cüneyt Aytekin, M.D., Professor

### 7. FEATURES OF THE COURSE

This course consists of two 50-minute lectures with no laboratory applications

## 8. THE LANGUAGE OF THE COURSE

Turkish

## **MEDICAL ONCOLOGY**

### **1. DESCRIPTION**

Based on tumor biology and tumor kinetics, general principles of cancer treatment will be described.

### **2. LEVEL**

**a.Prerequisite:** None

**b.Objectives:** The objective of the course is to describe tumor biology and kinetics to the students and subsequently in the light of this information general principles of cancer treatment and chemotherapeutics used in cancer and their mechanism of action will be discussed.

**c.References:**

#### Textbooks

- 1) DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology, Eighth Edition 978-0-7817-7207-5
- 2) Manual of Clinical Oncology Casciato DA, 6th Edition 2008
- 3) MD Anderson Manual of Medical Oncology by Hagop M. Kantarjian 2006

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

Prof. Dr. Özgür Özyılkan

### **5. LENGTH AND PERIOD**

This course includes 2 hours of lecture. Topics to be covered are as follows:

**Committee 2:**

Lecture 1	Malignancies of respiratory system (I)
Lecture 2	Malignancies of respiratory system (II)

## **6. TEACHING AND LEARNING METHODS OF THE COURSE**

This course includes lectures, and class discussions

## **7. ASSESSMENT METHODS OF THE COURSE**

The students are responsible from all the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures

At the end of each committee each student will take multi-choice exam.

## **9. THE LANGUAGE OF INSTRUCTION**

Turkish.

## **10. LEARNING OUTCOMES**

At the end of the course, the student is expected to be able to understand general principles of cancer treatment based on tumor biology and kinetics.



## **CARDIOVASCULAR SURGERY**

### 1. IDENTIFICATION OF THE COURSE

Cardiovascular surgery lectures in “Circulatory & Respiratory Systems” committee

### 2. COURSE DESCRIPTION

The purpose of the course is giving knowledge about the surgical therapies of the heart and vessel diseases to third year medical students.

### 3. LEVEL AND PREREQUISITES OF THE COURSE

This course is only for third year medical students. All the students are expected to complete the second year in the medical faculty successfully which they took lectures on the anatomy and physiology of the circulatory system.

### 4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE

- The surgical therapies of the cardiovascular diseases must be discussed generally.
- The essentials of the extracorporeal circulation will be given
- Surgical methodology of the major heart and vessel operations must be taught.
- Physical examination of the vessel and the interpretation of the major findings are practised.

### 5. REFERENCES OF THE COURSE

### 6. TEACHING STAFF

Sait A İmacı, M.D, Professor

Tankut Akay, M.D, Associate Professor

Ahmet Hatipo lu, M.D, Professor

### 7. FEATURES OF THE COURSE

This course consists of five 50-minute lectures with no laboratory applications.

### 8. THE LANGUAGE OF INSTRUCTION

Turkish.

## **CARDIOLOGY**

### **1. IDENTIFICATION OF THE COURSE**

Cardiology – Cardiology lectures in “Circulatory & Respiratory Systems” committee

### **2. COURSE DESCRIPTION**

Cardiology course for third year medical students aims to give the fundamental information about heart diseases. The initial lectures will cover evaluation of the patient with heart diseases, use and interpretation of diagnostic tests. Thereafter, the etiology, clinical features and treatment of different types of heart diseases will be lectured to the class.

### **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for third year medical students and will be given during the “Circulatory & Respiratory Systems” committee. All the students are expected to complete the second year in the medical faculty successfully which they took lectures on the anatomy and physiology of the circulatory system.

### **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

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

- determine the appropriate diagnostic tests in cardiology for evaluating a patient depending on history and physical examination and interpret the major findings in basic tests such as electrocardiogram and chest roentgenogram
- diagnose heart failure if provided with essential clinical and laboratory findings and plan basic therapy based on these findings
- suspect valvular heart disease in a patient with symptoms and signs attributable to this disorder and send the patient to a referral center for further evaluation
- inform his/her environment about the pathogenesis and risk factors for atherosclerosis and coronary heart disease
- approach to a patient with myocardial infarction
- determine if an individual has hypertension based on blood pressure measurements and plan basic tests to evaluate hypertension if the individual is hypertensive
- inform his/her environment about rarer forms of heart disease such as myocarditis, endocarditis and pericarditis

### **5. REFERENCES OF THE COURSE**

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

Printed version of the previous years’ lectures

### **6. TEACHING STAFF**

Haldun Mūderriso lu, M.D, Proffessor  
Bülent Özin, M.D, Proffessor  
Aylin Yıldırım, M.D, Proffessor  
Bahar Pirat, M.D, Associate Proffessor  
Melek Uluçami M.D, Associate Proffessor  
Elif Sade, M.D, Associate Proffessor

Iyas Atar, M.D, Associate Professor  
Alp Aydinalp, M.D, Assistant Professor

7. FEATURES OF THE COURSE

This course consists of 26 50-minute lectures with no laboratory applications.

8. THE LANGUAGE OF INSTRUCTION

Turkish

## **I. Identification of the course:**

### **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

#### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

#### **3. Level: 345**

##### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

### c. Intended Learning Outcomes

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

### 4. Compulsory or Elective Course

Is a compulsory course for students in the Faculty of Medicine.

### 5. Teaching Staff

Selda Erdem Çekiç

### 6. Length and Period

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b>	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b>	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b>	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-

	Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b>	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b>	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b>	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b>	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b>	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b>	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.

## 7. Teaching and Learning Methods

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

## **8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

<b>Name</b>	4 <sup>rd</sup> Committee: DIGESTIVE SYSTEM
<b>Status</b>	Compulsory
<b>ECTS credits</b>	4,5
<b>Responsibility</b>	Doç. Dr. Murat KORKMAZ
<b>Prerequisite</b>	None
<b>Period</b>	3 weeks, 70 hours
<b>Content</b>	This course includes lectures on the mechanisms, diagnostic and therapeutic methods on digestive system.
<b>Objectives</b>	The course aims to familiarize the students with the basis of digestive system diseases, diagnostic and therapeutic approaches, the principles of medical (pharmacological) approach in the treatment of the gastrointestinal system diseases, and with the pharmacokinetic, pharmacodynamic properties and also surgical approaches to digestive system diseases. The aim was also to familiarize students with the basic concepts and nomenclature in the pathology of the organs mentioned above and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms
<b>Learning Outcomes</b>	At the end of the course, the student is expected to be able to understand general pathogenesis and morphology of inflammation, hemodynamic disorders and carcinogenesis. The students will have the basic knowledge on diagnostic and therapeutic approaches about digestive system diseases. The students should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse and toxic effects of the drugs used for the management of gastrointestinal diseases.
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. Katzung B.G. 2004. Basic &amp; Clinical Pharmacology, 9. Basım, Appleton &amp; Lange, Stamford, A.B.D.</li> <li>2. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman &amp; Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.</li> <li>3. Katzung B.G. 2004. Basic &amp; Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton &amp; Lange, Stamford, U.S.A.</li> <li>4. Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999</li> <li>5. Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996</li> </ol>
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical (%95), Medical English (%5)
<b>Language</b>	Turkish

## PATHOLOGY

### 1.DESCRPTION

This course deals with pathologic basis of tongue, salivary glands, gastrointestinal tract organs, liver, gallbladder-extrahepatic bile ducts, and pancreas diseases as well as immunologic and molecular and pathophysiologic mechanisms of these diseases.

### 2.LEVEL

a. **Prerequisite:** None

b. **Objectives:** The objective of the course is to familiarize students with the basic concepts and nomenclature in the pathology of the organs mentioned above and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms.

c. **Learning of outcomes:**

At the end of the course, the student is expected to be able to understand general pathogenesis and morphology of gastrointestinal tract, liver, gallbladder- extrahepatic bile ducts, and pancreas diseases.

d. **References:**

### Textbooks

1) Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999

2) Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996

3) Anderson's Pathology; Eds. Damjanov I., Linder J; Tenth Edition, Mosby, 1996

4) Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992

### 3.MANDATORY OR OPTIONAL COURSE

This course is a mandatory course.

### 4.TEACHING STAFF

Fazilet Karaselçuk, MD, Prof Dr

Ebru ebne Ayva, MD

Tuba Canpolat, MD. Lecturer.

### 5.LENGTH AND PERIOD

This course includes 15 hours of pathology lectures. Topics to be covered are as follows:

SUBJECTS	
1- Diseases of the tongue and the salivary glands	Pathology of the diseases of the tongue and the salivary glands
2- Esophagus	Pathology of the esophagus
3- Benign diseases of the stomach	Pathology of the benign diseases of stomach
4- Tumors of the stomach	Pathology of the malign diseases of stomach
5- Tumors of the small intestine	Tumors of the small intestine

6- Malabsorption	Malabsorption syndromes
7- Tumors of the large intestine	Kalın barsak tümörleri
8- Idiopathic inflammatory bowel diseases	Pathology of the idiopathic inflammatory bowel diseases
9- Laboratory practises	Upper and lower gastrointestinal tract 1-2 (2 saat)
10-12 Liver diseases	Pathology of the liver (Hepatitis, cirrhosis, neoplasia) 1-3
13- Diseases of the gallbladder and the pancreas	Pathology of the diseases of the gallbladder and the pancreas
14- Disorders of the extrahepatic bile ducts	Pathology of the disorders of the extrahepatic bile ducts –
15- Laboratory practises	Liver, gallbladder and the pancreas

#### **6. TEACHING AND LEARNING METHODS OF THE COURSE**

Third course includes lectures, class discussions and laboratory practices

#### **7. ASSESSMENT METHODS OF THE COURSE**

The students are responsible from all the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures. At the end of each committee each student will take multi-choice exam.

#### **8. THE LANGUAGE OF INSTRUCTION**

Turkish.

## **PEDIATRIC GASTROENTEROLOGY**

Pediatric Gastroenterology in year III Gastrointestinal System Course  
Lessons as Lectures

### **1. Malabsorption syndrome**

### **2. Cirrhosis in childhood**

Definition of the course

Aim: Gaining basic knowledge about human gastrointestinal system disorders

Congenital or acquired diseases of pediatric gastrointestinal system leading to malabsorption or cirrhosis in children. Definition, diagnosis and clinical judgment of these disorders.

### **THE LEVEL AND THE PREREQUISITES OF THE LESSONS**

1. These lessons take place in medical faculty education programme for III<sup>rd</sup> year medical students in Gastrointestinal System Diseases Course.  
Any medical student, who successfully completed the education programme of the Year II in our medical faculty, can take this course.

### **The output aimed:**

1. A medical student who takes this course should know the diseases that leads to cirrhosis and malabsorption syndrome in childhood.
2. When we consider malabsorption and cirrhosis in children?
3. What are the clues in medical history? Which clinical signs and symptoms indicate cirrhosis and malabsorption?
4. What kind of diagnostic tests should be included in laboratory work-up of these children? A medical student should interpret the results of the diagnostic test related to malabsorption syndrome and childhood cirrhosis. .
5. Short bowel syndrome, cystic fibrosis, celiac disease should be described by the medical student. .
6. The complications and treatment of these complications of chronic diarrhea and malabsorption should be described.
7. A medical student after this course can recognize biliary atresia and extrahepatic bile duct abnormalities.
8. What are the medical urgencies in terms of treatment? Which disease (s) need urgent diagnosis to prevent its progression to cirrhosis? Galactosemia, tyrosinemia? Diagnosis and treatment of these diseases.
9. Can describe the prolonged jaundice in newborns. When we take blood for direct bilirubin testing? What will happen if we do not perform direct bilirubin measurement in babies with prolonged jaundice?
10. Can tell the underlying diseases causing direct and indirect hyperbilirubinemia
11. Should not cause any delay in diagnosing a patient with direct hyperbilirubinemia. Should know when she/he refer them
12. Should understand the importance of diagnosing patients with malabsorption syndrome and chronic diarrhea.

### **TEACHING STAFF**

Figen Özçay, M.D. Professor

## **MEDICAL ONCOLOGY (GASTROINTESTINAL SYSTEM)**

### **IDENTIFICATION OF THE COURSE**

Department of Internal Medicine: Phase III Gastrointestinal System Subject Committee, Medical Oncology Lectures;

1. Gastrointestinal system cancers-1
2. Gastrointestinal system cancers-2
3. Colorectal Cancers

### **COURSE DESCRIPTION**

Included in the Gastrointestinal System subject committee; the lectures aim to give the basic information on diseases of gastrointestinal system to the students. Diagnostic tools, pathophysiology, clinical management and treatment of the most commonly seen gastrointestinal system cancer in adult individuals are lectured.

### **LEVEL AND PREREQUISITES OF THE COURSE**

These lectures are for only phase III students of medical faculty and is included in the Gastrointestinal System subject committee.

All students are required to have successfully completed phase II; during which, gastrointestinal embryology, anatomy and physiology are taught.

### **OBJECTIVES OF THE COURSE:**

At the end of this course, the students are expected to be able to do the following:

1. Decide the diagnostic tools to be used according to physical examination findings of a case presenting with gastrointestinal system complaints and evaluate their results.
2. Have enough information about; esophageal cancer, gastric cancer, pancreatic cancer, cholangiocellular cancer, hepatocellular cancer, gastrointestinal stromal tumors, colon cancer and rectal cancer.
3. Know risk factors.
4. Diagnostic procedures.
5. Have a general idea of how these diseases are treated.

### **REFERENCES OF THE COURSE**

1. DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology, Eighth Edition 978-0-7817-7207-5
2. ESMO 2010 Congress Highlights, Milan

### **NAME OF THE TEACHING STAFF OF THE COURSE**

Prof Dr Hüseyin Abalı, M.D.

### **THE PROPERTIES OF THE COURSE**

The course is composed of 3 (three) theoretical lectures of 50 minutes each.

### **THE LANGUAGE OF THE COURSE**

Turkish

## **TIP 362: PEDIATRIC SURGERY**

### **IDENTIFICATION OF THE COURSE**

Pediatric Surgery: Phase III Gastrointestinal System Subject Committee, Pediatric Surgery Lectures;

4. Gastrointestinal system atresia
5. Congenital aganglionic megacolon and anorectal malformations
6. Distal gastrointestinal system hemorrhage in children
7. Pediatric biliary system anomalies

### **COURSE DESCRIPTION**

Included in the Gastrointestinal System subject committee; the lectures aim to give the basic information on diseases of gastrointestinal system to the students. Diagnostic tools, clinical management and treatment of congenital gastrointestinal anomalies and acquired surgical diseases at pediatric age are lectured.

### **LEVEL AND PREREQUISITES OF THE COURSE**

This lecture is for only phase III students of medical faculty and is included in the Gastrointestinal System subject committee.

All students are required to have successfully completed phase II; during which, gastrointestinal embryology, anatomy and physiology are taught.

### **OBJECTIVES OF THE COURSE:**

At the end of this course, the students are expected to be able to do the following:

6. Decide the diagnostic tools to be used according to physical examination findings of a case presenting with congenital gastrointestinal system complaints and evaluate their results.
7. Have enough information about; esophageal atresia, gastric volvulus, pyloric atresia, hypertrophic pyloric stenosis, duodenal atresia, annular pancreas, jejuno-ileal atresia, meconium ileus, meconium plug syndrome, necrotizing enterocolitis, intestinal duplication and colonic atresia; in differential diagnosis of gastrointestinal system atresia.
8. Know emergent interventional necessities, diagnostic procedures and transportation precautions for patients admitting with gastrointestinal obstruction.
9. Know clinical presentation, diagnostic procedures and treatment of congenital aganglionic megacolon and anorectal malformations.
10. Have enough information about hemorrhagic disease of newborn, swollen maternal blood, necrotizing enterocolitis, meckel diverticulum, intussusception, anal fissure and gastrointestinal polyps in differential diagnosis of pediatric distal gastrointestinal bleeding.
11. Be capable of history taking, physical examination, diagnostic management, differential diagnosis for a child with distal gastrointestinal bleeding; performing basic emergent interventions; directing the patient for proper (further) treatment.
12. Have enough information about infectious, metabolic and genetic diseases in differential diagnosis of pediatric biliary anomalies; know diagnostic and therapeutic management of biliary atresia and choledocal cyst.
13. Briefly inform the parents on diseases mentioned and their prognosis.
14. Decide the appropriate institution for further treatment and transport the patient properly.

### **REFERENCES OF THE COURSE**

3. Bebek ve Çocukların; Cerrahi ve Ürolojik Hastalıkları, 2006, Palme Yayıncılık
4. Pediatric Surgery, 6<sup>th</sup> Edition, 2006, Mosby.
5. Jones' Clinical Paediatric Surgery: Diagnosis and Management, 6th Ed., 2008, Blackwell Publishing

6. Katkı Pediatri Dergisi, Çocuk Cerrahisi I-II, 2004, Cilt:26, Sayı:4-5
7. Published lecture notes

#### **NAME OF THE TEACHING STAFF OF THE COURSE**

Akgün H ÇŞÖNMEZ, M.D, Professor of Pediatric Surgery  
brahim ÖTGÜN, M.D.

#### **THE PROPERTIES OF THE COURSE**

The course is composed of 4(four) theoretical lectures of 50 minutes each.

#### **THE LANGUAGE OF THE COURSE**

Turkish

### **GASTROINTESTINAL AND HEPATOBILIARY SYSTEM**

#### **1. DESCRIPTION**

This course covers the major topics on gastrointestinal and hepatobiliary system diseases. Aim of the course is to give detailed information on prevalent disease of gastroenterology and hepatology.

#### **2. LEVEL**

- a. **Prerequisites:** None.
- b. **Objective:** The main goal of this course is to give ability of diagnosing and treating the diseases of gastrointestinal and hepatobiliary system to medical students.
- c. **Learning outcomes:** Basic principles of approach to gastrointestinal diseases should be learned.
- d. **References:**

1. Friedman LS, Sleisenger MH. Gastrointestinal and Liver Disease. 7<sup>th</sup> ed. Saunders Co. 2002, Philadelphia
2. Yamada T, Alpers DH, Laine L, Owyang C, Powell DW. Yamada: Textbook of Gastroenterology, 4th Edition. Lippincott Williams & Wilkins 2003.
3. Sherlock S, Dooley J. Diseases of the Liver and Biliary System. 11<sup>th</sup> ed. Blackwell Publishing Co. 2002.
4. Zakim D, Boyer TD. Hepatology: A Text Book of Liver Disease. 3<sup>rd</sup> ed. Saunders Co. 2002 Edindurg
5. McIntyre N. Oxford Textbook of Clinical Hepatology. 4<sup>th</sup> ed. Oxford University Press 2002.
6. Hauser SC, Pardi DS, Poterucha JJ. Mayo Clinic Gastroenterology and Hepatology Board Review. Mayo Clinic Scientific Press. 2003.

Supplementary readings:

1. Özden A, ahin B, Yılmaz U, Soykan . Gastroenteroloji. Türk Gastroenteroloji Vakfı Yayınları, 2003, Ankara

2. Özütemiz A. Güncel Gastroenteroloji Dergisi. Türk Gastroenteroloji Vakfı Yayınları

3. Özden A. Helicobacter pylori. Türk Gastroenteroloji Vakfı Yayınları, 2003, Ankara

### **3. MANDATORY or OPTIONAL LECTURE**

This lecture is a mandatory lecture

### **4. TEACHING STAFF**

Dr. Ender Serin, professor

Dr. Birol Özer, associated professor

Dr.Murat Korkmaz, associated professor

Dr. Haldun Selçuk, associated professor

Dr. Nurten Sava , associated professor

Dr. Hakan Ünal, assistant professor

### **5.LENGTH AND PERIOD**

This course consists of topics mentioned below and the length of the course is 3 weeks.

Topics to be covered are as follows:

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Approach to gastrointestinal system disorders' symptoms

Dyspepsia- Gastritis

Upper and lower GI tract bleeding

Jaundice

Ascites and spontaneous bacterial peritonitis

Portal hipertensiyon

Invasive procedures in gastroenterology

Gastroesophageal reflux disease

Peptic ulcer and Helicobacter pylori

Chronic abdominal pain

Cirrhosis and systemic complications

Hepatic encephalopathy

Alcoholic and nonalcoholic fatty liver disease

Chronic Hepatitis syndrome (Otoimmune hepatitis and toxic hepatitis)

Esophageal motility disorders

Antibiotic associated diarrhea, pseudomembranoeous enterocolitis and intestinal bacterial overgrowth

Colonic polyps and poliposis coli syndromes

Liver function tests

## **6. TEACHING AND LEARNING METHODS**

The course consists of lectures, class discussions, and reading assignments.

## **7. ASSESSMENT**

Students will be responsible from all textbooks and articles. Students are encouraged to make extra readings. Class participation is a vital component of this course. Students are expected to attend classes regularly. At least 80 % attendance is required. Each student will be evaluated according to his/her performance during class discussions and a committee examination at the end of the course.

An examination was undertaken to assess the student's performance at the end of course. There will be a final exam at the end of the education year. The mean score of committees will be counted for the 65 % of the grade and the final exam will be counted for 35 %. The final exam will cover all topics.

**8. LANGUAGE:** The language of the course is Turkish.

## **INTRODUCTION TO GENERAL SURGERY**

### **1. DESCRIPTION**

This course reviews basic subjects in general surgery. After a brief overview of the course, the course deals with surgical principles as well as trauma and surgical implications of systemic diseases. The subjects are introduction to general surgery.

### **2. LEVEL**

- a. Prerequisites:** None.
- b. Objectives:** The first objective of the course is to familiarize students with the basic concepts and nomenclature in surgery. The second objective is to help students to learn how to search for more information in literature.
- c. Learning outcomes:** Basic principles in evaluating patients general surgery should be learned.
- d. References:**

#### Textbooks

1. Schwartz SI, Shires TG, Spencer FC, Daly JM, Fischer JE, Galloway AC. Principles of Surgery. 1999, McGraw-Hill, USA.
2. Townsend CM, Harris JW. Sabiston Textbook of Surgery. 2001, 17th ed. WB Saunders Comp, USA.
3. Wilmore DW, Cheung LY, Harken AH, Holcroft JW, Meakins JL, Soper NJ. American College of Surgeons ACS Surgery Principles and Practice. 2002, WebMD Corp., USA.

### **3. MANDATORY OR OPTIONAL COURSES**

This course is a mandatory course.

### **4. TEACHING STAFF**

Doç.Dr. Yahya Ekici, Associated professor  
Dr. Tugan Tezcaner, MD

## **5. LENGTH AND PERIOD**

This course is an eight weeks course, which consists of 2 hours. Topics to be covered are as follows:

<b>Hour</b>	<b>Subject</b>
1	Intestinal obstruction
2	Acute abdomen syndrome and abdominal pain

## **6. TEACHING AND LEARNING METHODS**

The course will consist of lectures and class discussions.

## **7. ASSESSMENT**

Students will be responsible from all lectures. Class participation is a vital component of this course. Students are expected to attend classes regularly. At least 90 % attendance is required. Students are expected to read the assigned material in advance to be ready to participate to class discussions.

There will be a final exam. The final exam will cover all topics.

**8. LANGUAGE:** The language of the course is Turkish.

## **INFECTIOUS DISEASES**

### **1. IDENTIFICATION OF THE COURSE INFECTIOUS DISEASES**

### **2. COURSE DESCRIPTION**

Three lessons entitled “Acute viral hepatitis”, “Food poisoning”, “Acute Diarrheas” are presented in the Gastrointestinal System Committee for the third year medical students.

Teaching staff:

Dr. Hande Arslan, professor

Dr. Ay egül Ye ilkaya, MD

### **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for the third year medical students and given during the Gastrointestinal System Committee. All the students are expected to complete the second year in the medical faculty successfully.

### **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

**At the end of the “Acute viral hepatitis” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis of acute viral hepatitis according to clinical symptoms and signs,
2. To determine the tests (Complete blood count, blood chemistry, serologic markers of hepatitis, other laboratory or imaging tests when needed) required to diagnose which acute viral hepatitis definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

**At the end of the “Food poisoning” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis of food poisoning according to clinical symptoms and signs,
2. To determine the tests (Stool examination, complete blood count, other laboratory or imaging tests when needed) required to diagnose which food poisoning definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

**At the end of the “Acute diarrheas” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis of gastroenteritis according to clinical symptoms and signs,
2. To determine the tests (Stool examination, complete blood count, other laboratory or imaging tests when needed) required to diagnose which gastroenteritis definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

**5. REFERENCES OF THE COURSE**

1. Principles and Practice of Infectious Diseases  
Gerald L.Mandell, John E. Bennett, Raphael Dolin
2. Infectious Diseases  
Jonathan Cohen, William G. Powderly
3. enfeksiyon Hastalıkları  
Ayşe Willke Topçu, Güner Söyletir, Mehmet Doğanay

**6. FEATURES OF THE COURSE**

This course consists of three lectures entitled with no laboratory applications. The duration of each lecture is 50 minutes.

**7. THE LANGUAGE OF INSTRUCTION**

Turkish

## 1. IDENTIFICATION OF THE COURSE

### PHARMACOLOGY: DIGESTIVE SYSTEM (COMMITTEE 3)

## 2. DESCRIPTION

This course reviews the therapeutic approach to gastrointestinal system diseases, pharmacokinetic and pharmacodynamic properties, and adverse effects of the drugs used in the treatment of gastrointestinal diseases. It focuses on the gastrointestinal system pharmacology.

## 3. LEVEL

**a. Prerequisite:** None except for being successfully promoted from Phase II

**b. Objectives:** The course aims to familiarize the students with the principles of medical (pharmacological) approach in the treatment of the gastrointestinal system diseases, and with the pharmacokinetic, pharmacodynamic properties, adverse effects of the drugs used in gastrointestinal diseases.

**c. Learning outcomes:** At the end of the PHARMACOLOGY course, the students should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse and toxic effects of the drugs used for the management of gastrointestinal diseases.

### **d. References**

1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.
2. Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.
3. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.
4. Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.
5. Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.
6. Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.

7. Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

**4. THE STATUS OF THE COURSE:** This course is a mandatory course

#### **5. TEACHING STAFF OF THE COURSE**

Tolga Re at Aydos, MD, PhD (Assistant Professor of Pharmacology)

#### **6. THE PERIOD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lecture 1	Pharmacotherapy of peptic ulcer
Lecture 2	Emetic and antiemetic drugs
Lecture 3	Antidiarrheal agents
Lecture 4	Laxative and purgative drugs
Lecture 5	Supplementary drugs in digestion
Lecture 6	Hepatotoxic effects of drugs

#### **7. TEACHING AND LEARNING METHODS**

PHARMACOLOGY course will consist of lectures, class discussions and laboratory applications

#### **8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the PHARMACOLOGY course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

**9. THE LANGUAGE OF INSTRUCTION:** The language of the course is Turkish.

## **RADIOLOGY**

### **1. Identification**

- Gastrointestinal system radiology (Code:TIP 391)
- Liver,spleen,pancreas and biliary tract radiology (Code:TIP 391)

### **2. Description**

To impress the usefulness of radiology in the diagnosis of the gastrointestinal system pathologies, and describe some specific radiological findings in some diseases.

### **3. Level**

To teach the basic level radiological knowledge for using it during their daily clinical practice

### **4. References of the Course**

- Radiology Review Manual,1996 ,Third Edition.Wolfgang Dahnert.
- Klinik radyoloji,2002,Nobel Güne Kitabevi,Ercan Tuncel.

### **5. Compulsory or electivel course units**

TIP 391 is a compulsory course

### **6. Teaching staff**

Dr.Mehmet Co kun,, professor

### **7. Lenght and period**

TIP 391 is a course consisting of two lessons in gastrointestinal system committee .

### **8. Teaching and learning methods**

TIP 391 include lecture and discussion

### **9. Assesment Methods and Grading of the Course**

Students are tested by multiple choice questions at the end of the course for analysing their knowledge in gastrointestinal radiology.

### **10. The Language of Instruction**

Turkish

### **11. ECTS credit allocation**

## **I. Identification of the course:**

### **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

#### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

#### **3. Level: 345**

##### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

##### **c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

#### **4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

#### **5. Teaching Staff**

Selda Erdem Çekiç

## 6. Length and Period

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b> 08.09.-17-10 (12 hours)	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b> 20.10-01.12 (9 hours)	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b> 02.12. 26.12 (9 hours)	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b> 29-12-16.01 (9 hours)	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b> 02.02-04.03 12 hours	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b> 05.03-25.03 (6 hours)	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b> (9 hours) 26.03-21 April (9 hours)	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b> 22.04-12.05 (9 hours)	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b> 14.05-12-06 (9 hours)	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.

## 7. Teaching and Learning Methods

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

### **8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

<b>Name</b>	5 <sup>th</sup> Committee: HEMATOPOET C SYSTEM, ONCOLOGY AND IMMUNOLOGY
<b>Status</b>	Compulsory
<b>ECTS credits</b>	5,4
<b>Responsibility</b>	Ebru KOCA, MD, Associate Professor of Hematology
<b>Prerequisite</b>	None
<b>Period</b>	3 weeks, 83 hours
<b>Content</b>	This course includes lectures on normal hematopoiesis, benign and malign hematologic disorders, peripheral smear, immune system diseases and malignancies, therapeutic approaches
<b>Objectives</b>	Normal hematopoiesis including development, metabolism, kinetics, and function of red cells, white cells, and platelets and etiopathogenesis of various benign and malign hematologic disorders, their diagnosis and clinical findings are mentioned. Fundamentals of hemostasis and thrombosis, including coagulation pathways, laboratory procedures, which evaluate these mechanisms and treatment modalities are covered. Includes laboratory experiences dealing with basic routine tests performed in a clinical hematology laboratory, such as simple automated cell counting, blood smear morphology, and reticulocyte counts and coagulation parameters. The course aims to familiarize the students with the principles of medical approach in the treatment of the haematopoietic and immune system diseases and cancer chemotherapy. It also aims to teach and discuss the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse and toxic effects of the drugs used in haematopoietic and immune system diseases.
<b>Learning Outcomes</b>	At the end of the course, the students should learn the diagnostic and therapeutic approach to hematopoietic and immunologic diseases, should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse and toxic effects of the drugs used for the medical treatment of haematopoietic and immune system diseases and cancer.
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. Ronald Hoffman (2009) Hematology, Basic Principles and Practice, Philadelphia: Churchill Livingstone.</li> <li>2. G. Richard Lee (2008) Wintrobe's Clinical Hematology, Baltimore, Mass Publishing.</li> <li>3. P. Lanzowsky, (2005) Manual of Pediatric Hematology and Oncology fourth edition.</li> <li>4. Hardman J.G. ve Limbird L.E. (editörler) 2006. Goodman &amp; Gilman's The Pharmacological Basis of Therapeutics, 11. Basım, McGraw-Hill, New York, A.B.D.</li> <li>5. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman &amp; Gilman's Manual of Pharmacology and Therapeutics, Uluslararası Baskı, McGraw-Hill, New York, A.B.D.</li> </ol>
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical (%95), Medical English (%5)
<b>Language</b>	Turkish

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

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Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

## **PEDIATRIC HEMATOLOGY**

### **1. IDENTIFICATION**

**Name of the lesson:** Pediatric Hematology

### **2. DESCRIPTION**

Hematology literally means “the study of the formed elements (cells) of the blood.” These lessons introduce the general principles of hematologic evaluation, specimen collection, basic laboratory procedures, examination of peripheral blood smear, normal hematopoiesis, erythrocyte disorders, leukocyte disorders, hemostasis, benign and malignant hematologic disorders. Also, hematological changes during the development of a child and some peculiarities concerning childhood hematology are given.

### **3. LEVEL**

**A. Prerequisite:** None

**B. Objectives :** Normal hematopoiesis including development, metabolism, kinetics, and function of red cells, white cells, and platelets and etiology and pathogenesis of various benign and malignant hematologic disorders, their diagnosis and clinical findings are mentioned. Fundamentals of hemostasis and thrombosis, including coagulation pathways, laboratory procedures, which evaluate these mechanisms and treatment modalities are covered. Laboratory experiences dealing with basic routine tests performed in a clinical hematology laboratory, such as simple automated cell counting, blood smear morphology, and reticulocyte counts and coagulation parameters are also achieved.

### **References**

1. P. Lanzkowsky, (2005) *Manual of Pediatric Hematology and Oncology* fourth edition.
2. E. Anne Stiene Martin (1998) *Clinical Hematology: principles, Procedures, Correlations*, Philadelphia: Lippincott-Raven Publishers.
3. Ronald Hoffman (2009) *Hematology, Basic Principles and Practice*, Philadelphia: Churchill Livingstone.

4. G. Richard Lee (2008) Wintrobe's Clinical Hematology, Baltimore, Mass Publishing.
5. A. Victor Hoffbrand Color Atlas of Clinical Hematology, Mosby Publishing

#### 4. MANDATORY OR OPTIONAL COURSE

These lessons are mandatory course

#### 5. TEACHING STAFF

▲ Faik Sarıalio lu, MD (Professor of Pediatric Hematology and Oncology)  
 Ay e Erbay, MD (Associate Professor of Pediatric Hematology and Oncology)  
 Nalan Yazıcı, MD (Associate Professor of Pediatric Hematology and Oncology)

Biçimlendirilmi : ngilizce (Amerikan)

#### 6. LENGTH AND PERIOD

These hematology lessons consist of 14 hours. Topics to be covered are as follows:

Lesson 1-2	Hemoglobinopathies : Thalassemia and Sickle Cell anemia	2 hours
Lesson 3	Acute leukemias	1 hour
Lesson 4-5	Physiopathology of coagulation	2 hours
Lesson 6	Hemorrhagic diathesis	1 hour

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

## IMMUNOLOGY

### 1. DESCRIPTION

These lessons give basic knowledge about 1) cellular and molecular aspects of immune system structure and function in normal and immunopathological situations in man; 2) the principles and possibilities to measure different parameters of immunologically active cells and molecules; 3) the possibilities to influence the immune system function.

### 2. LEVEL

- a. **Prerequisites:** None.
- b. **Objectives :** The first objective of the lesson is to familiarize students with the basic concepts and approaches within general properties of immune response and to help students to understanding of how the immune system work. The second objective is to help students to understanding the connection between immune dysfunction and clinical outcomes.
- c. **Learning outcomes:** Basic principles in immunology should be learned
- d. **References:**

#### Textbooks

Abbas KA, Lichtman AH, Pober JS. (2000) *Cellular and Molecular Immunology* Philadelphia: W.B. Saunders Company, 4<sup>th</sup> edition.  
 Kılıçturgay K. (2003) *immünoloji 2003*, Bursa, Nobel&Güne , 3<sup>th</sup> edition  
 Roitt I, Brostoff J, Male D. (2001) *Immunology* London: Harcourt Publishers Limited, 6<sup>th</sup> edition.

#### Articles

Biassoni R, Cantoni C, Marras D, Giron-Michel J, Falco M, Moretta L, Dimasi N. 'Human natural killer cell receptors: insights into their molecular function and structure'. *J Cell Mol Med.* 2003 Oct-Dec;7(4):376-87.  
 Casatella MA. 'The production of cytokines by polymorphonuclear neutrophils'. *Immunology Today*, 1995 21-26, 1995.  
 Delves PJ, Roitt I. 'The immune system part one' *The New England Journal of Medicine* Mackey RI, Rosen FS (ed) Massachusetts medical society 2000 July 13: 37-49  
 Delves PJ, Roitt I. 'The immune system second of two parts' *The New England Journal of Medicine* Mackey RI, Rosen FS (ed) Massachusetts medical society 2000 July 13: 108-115  
 Davidson A, Diamond B. 'Autoimmune Diseases' *The New England Journal of Medicine* Mackey RI, Rosen FS (ed) Massachusetts medical society 2001 August 2: 340-350  
 Kamradt T. 'Tolerance and Autoimmunity' *The New England Journal of Medicine* Mackey RI, Rosen FS (ed) Massachusetts medical society 2001 march: 655-664

### 3. MANDATORY OR OPTIONAL COURSE

These lessons are mandatory.

### 4. TEACHING STAFF

Bilkay Ba türk, MD (Professor of Immunology)

Özlem Özbek, MD (Associate Professor of Pediatric Allergy and Pulmonology)

Müge Demirbilek, MD (Associate Professor of Pediatrics)

## 5. LENGTH AND PERIOD

Topics to be covered are as follows

Topic
1. Immune tolerance
2. Apoptosis
3. Primary immunodeficiency diseases
4. Immunology of allergic diseases
5. Immunology of infection
6. Systemic autoimmunity (2 hrs)

## 6. TEACHING AND LEARNING METHODS

These lessons will consist of lectures, class discussions, and reading assignments. Teaching materials for lecture/classroom demonstration: Power point slides, photoslides and movie for special issue.

## 7. ASSESSMENT

Students will be responsible from all textbooks related the lessons. Students are encouraged to make extra readings. Class participation is a vital component of these lessons. Students are expected to attend classes regularly. At least 70 % attendance is required. Students are expected to read the assigned material in advance to be ready to participate to class discussions. Each student will be evaluated according to his/her performance during class discussions.

At the end of the lessons there will be a final exam, cover the all topics.

**8. LANGUAGE:** The language of these lessons is Turkish.

**MEDICAL GENETICS (5<sup>th</sup> COMMITTEE)**Silinebilir : **4TH**

Beyimlendirilmi : Ust simge

Beyimlendirilmi : ngilizce (Amerikan)

**1. DESCRIPTION :** After the completion of this lecture, students will have the knowledge of mechanisms of cancer and immunogenetics

**2. LEVEL :**

- Prerequisite:** None
- Objective:** The objective of the course is to give a brief overview on the basic concepts on genetics of cancer and immunogenetics.
- Learning outcomes:** The student should be able to explain basic genetic principles underlying cancer.
- References:**

Lewis R., 2001 "Human Genetics, Concepts and Applications" Mc Graw Hill New York.

Thompson MW., McInnes RR., Willard HF., 2001 "Genetics in Medicine" 6th.ed. W.B. Saunders Company, Philadelphia.

**3. MANDATORY OR OPTIONAL COURSE UNITS:** It is a mandatory course.

**4. TEACHING STAFF:**

Feride ahin, MD, PhD (Professor of Genetics)

Yunus Kasım Terzi, MD, PhD

**5. LENGTH AND PERIOD :** 7 hours in this committee:

Hours	Topics
1-2	Genetics of immunology
3-7	Genetics of cancer

**6. TEACHING AND LEARNING METHODS:** The course will consist of lectures and class discussions.

**7. ASSESSMENT:** The coordination office through test examinations evaluates students.

**8. THE LANGUAGE:** The language of the course is Turkish.

**9. ECTS CREDIT ALLOCATION**

Beyimlendirilmi : ngilizce (Amerikan)

## **INFECTIOUS DISEASES**

### **1. IDENTIFICATION OF THE COURSE INFECTIOUS DISEASES**

### **2. COURSE DESCRIPTION**

Two lessons entitled “Infections in the immunocompromised host” and “Reticuloendothelial system infections” presented in the Hematopoetic System, Oncology and Immunology Committee for the third year medical students.

### **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for the third year medical students and given during the Hematopoetic System, Oncology and Immunology Committee. All the students are expected to complete the second year in the medical faculty successfully.

### **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

**At the end of the “Infections in the immunocompromised host” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis of infections in the immunocompromised host according to clinical symptoms and signs,
2. To determine the tests (Complete blood count, urinalysis, urine culture, chest X-ray, blood chemistry, blood culture and other laboratory or imaging tests when needed) required to diagnose which infection definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

**At the end of the “Reticuloendothelial system infections” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis of reticuloendothelial system infections according to clinical symptoms and signs,
2. To determine the tests (complete blood count, blood smear, blood chemistry, abdominal ultrasonography, other laboratory or imaging tests when needed) required to diagnose which infection definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

### **5. REFERENCES OF THE COURSE**

1. Principles and Practice of Infectious Diseases  
Gerald L.Mandell, John E. Bennett, Raphael Dolin
2. Infectious Diseases  
Jonathan Cohen, William G. Powderly
3. enfeksiyon Hastalıkları  
Ay e Willke Topçu, Güner Söyletir, Mehmet Do anay

### **6. FEATURES OF THE COURSE**

This course consists of two lectures entitled “Infections in the immunocompromised host” and “Reticuloendothelial system infections”. The duration of each lecture is 50 minutes.

**7. TEACHING AND LEARNING METHODS**

Lessons will consist of lectures, class discussions and laboratory practice and case discussion.

**8. ASSESSMENT**

Students will be responsible from all textbooks and lessons. Students are encouraged to make extra readings. Students are expected to attend classes regularly. At least 70 % attendance is required. There will be a final exam. The final exam will cover all topics.

**9. LANGUAGE:** The language of lessons is Turkish.

**10. ECTS CREDIT ALLOCATION:**

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## **PHARMACOLOGY**

Biçimlendirilmi : nglizce (Amerikan)

### **1. IDENTIFICATION OF THE COURSE**

#### **PHARMACOLOGY: HAEMATPOIETIC SYSTEM, ONCOLOGY AND IMMUNOLOGY (COMMITTEE 5)**

Silinmi : 4

Biçimlendirilmi : nglizce (Amerikan)

### **2. DESCRIPTION**

This course reviews the therapeutic approach to haematopoietic and immune system diseases, and cancer. It also reviews the pharmacokinetic and pharmacodynamic properties, action mechanisms, adverse and toxic effects of the drugs used in the treatment of haematopoietic and immune system diseases, and cancer. Additionally, this course focuses on haematopoietic and immune system pharmacology, and chemotherapeutics used in cancer treatment.

### **3. LEVEL**

**a. Prerequisite:** None except for being succesfully promoted from Phase II.

**b. Objectives:** The course aims to familiarize the students with the principles of medical (pharmacological) approach in the treatment of the haematopoietic and immune system diseases and cancer chemotherapy. It also aims to teach and discuss the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse and toxic effects of the drugs used in haematopoietic and immune system diseases. In addition, to teach the action mechanisms of and mechanism of resistance to cancer chemotherapeutics is also aimed by this course.

**c. Learning outcomes:** At the end of the PHARMACOLOGY course, the students should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse and toxic effects of the drugs used for the medical treatment of haematopoietic and immune system diseases and cancer. In addition, the student is expected to discuss the mechanisms of drug resistance to chemotherapeutics during cancer treatment.

Biçimlendirilmi : nglizce (Amerikan)

Biçimlendirilmi : nglizce (Amerikan)

#### **d. References**

1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.
2. Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.
3. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.
4. Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.
5. Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.
6. Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.
7. Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

**4. THE STATUS OF THE COURSE:** This course is a mandatory course

Biçimlendirilmi : ngilizce (Amerikan)

**5. TEACHING STAFF OF THE COURSE**

. Remzi Erdem, MD, PhD (Professor of Pharmacology)

**6. THE PER OD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 2 weeks and 3 days. Topics to be covered are as follows:

Lecture 1	Drugs used in anemias
Lectures 2-3	Immunomodulator drugs
Lectures 4	Haemostatic drugs and blood related products
Lecture 5	Drugs used in coagulopathies
Lecture 6-8	Drugs used in cancer chemotherapy

Silinmi : 7

Biçimlendirilmi : ngilizce (Amerikan)

**7. TEACHING AND LEARNING METHODS**

PHARMACOLOGY course will consist of lectures, class discussions

**8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the PHARMACOLOGY course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

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

Biçimlendirilmi : ngilizce (Amerikan)

## **HEMATOLOGY**

### **1. IDENTIFICATION**

**Name of the lesson:** Hematology

### **2. DESCRIPTION**

Hematology literally means “the study of the formed elements (cells) of the blood.” These lessons introduce the general principles of hematologic evaluation, specimen collection, basic laboratory procedures, examination of peripheral blood smear, normal hematopoiesis, erythrocyte disorders, leukocyte disorders, hemostasis, benign and malignant hematologic disorders.

### **3. LEVEL**

**A. Prerequisite:** None

**B. Objectives :** Normal hematopoiesis including development, metabolism, kinetics, and function of red cells, white cells, and platelets and etiopathogenesis of various benign and malignant hematologic disorders, their diagnosis and clinical findings are mentioned. Fundamentals of hemostasis and thrombosis, including coagulation pathways, laboratory procedures, which evaluate these mechanisms and treatment modalities are covered. Includes laboratory experiences dealing with basic routine tests performed in a clinical hematology laboratory, such as simple automated cell counting, blood smear morphology, and reticulocyte counts and coagulation parameters.

### **References**

- 1- E. Anne Stiene Martin (1998) *Clinical Hematology: principles, Procedures, Correlations*, Philadelphia: Lippincott-Raven Publishers.
- 2- Ronald Hoffman (2009) *Hematology, Basic Principles and Practice*, Philadelphia: Churchill Livingstone.
- 3- G. Richard Lee (2008) *Wintrobe’s Clinical Hematology*, Baltimore, Mass Publishing.
- 4- A. Victor Hoffbrand *Color Atlas of Clinical Hematology*, Mosby Publishing
- 5- P. Lanzowsky, (2005) *Manual of Pediatric Hematology and Oncology* fourth edition.

#### 4. MANDATORY OR OPTIONAL COURSE

These lessons are mandatory course

#### 5. TEACHING STAFF

Sema Karku , MD (Professor of Hematology)

Ebru Koca, MD (Associate Professor of Hematology)

#### Selami Koçak Toprak, MD (Assistant Professor of Hematology) 6. LENGTH AND PERIOD

These hematology lessons consist of 13 hours. Topics to be covered are as follows:

• Introduction and classification of anemia
• Erythrocyte indexes and evaluation
• Hematopoietic stem cell and hematopoietic differentiation
• Iron, vitamin B12, folic acid metabolism Myeloproliferative disorders (2 hours)
• Iron deficiency anemia
• Megaloblastic anemias
• Aplastic anemia
• Myeloproliferative diseases
• Practical peripheral smear (2 hours)
• Blood group, coombs and mixing tests (2 hours)

#### 7. TEACHING AND LEARNING METHODS

Lessons will consist of lectures, class discussions and laboratory practice and case discussion.

#### 8. ASSESSMENT

Students will be responsible from all textbooks and lessons. Students are encouraged to make extra readings. Class participation is a vital component of this course. Students are expected to attend classes regularly. At least 70 % attendance is required. There will be a final exam. The final exam will cover all topics.

**9. LANGUAGE:** The language of lessons are Turkish.

#### 10. ECTS CREDIT ALLOCATION:

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi Tablo

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : Aralık Önce: 0 nk,  
Satır aralı ı: tek, Madde aretli +  
Düzey: 1 + Hizalandı ı yer: 0,63 cm +  
Girinti yeri: 1,27 cm

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

## **NUCLEAR MEDICINE**

Silinmi : **HEMATOLOGY**

Biçimlendirilmi : ngilizce (Amerikan)

### **1-IDENTIFICATION OF THE COURSE:**

Nuclear Medicine

Silinmi : Hematology

Biçimlendirilmi : ngilizce (Amerikan)

### **2- COURSE DESCRIPTION:**

This course is designed to provide students with information about nuclear medicine techniques that use the diagnosis of hematological diseases.

### **3-LEVEL OF THE COURSE**

**a. Prerequisites of the Course:** None

**b. Objectives of the Course:** The aim of this course is

-to teach imaging of hematopoietic organs and evaluating kinetics of hematopoietic cells with nuclear medicine techniques in diagnosis of hematological diseases.

Biçimlendirilmi : ngilizce (Amerikan)

-to teach the nuclear medicine techniques used in diagnosis and treatment of oncologic diseases

Biçimlendirilmi : ngilizce (Amerikan)

**c. References of the Course:**

- 1-Görpe A., Cantez S. (1992). Pratik Nükleer Tıp, stanbul Tıp Fakültesi Vakfı
- 2-Wilson AW. (1998). Textbook of Nuclear Medicine, Lippincott-Raven
- 3-Datz FL. (1993). Handbook of Nuclear Medicine, Mosby

Biçimlendirilmi : Girinti: İlk satır: 0 cm

Biçimlendirilmi : Girinti: Sol: 0 cm

### **1- THE STATUS OF THE COURSE:**

This course is a mandatory course.

### **2- NAME OF THE TEACHING STAFF OF THE COURSE:**

Esra Arzu Genço lu, MD (Assocait Professor of Nuclear Medicine)

### **3- THE PERIOD AND THE PLAN OF THE COURSE:**

This committee includes 1 hour of Nuclear Hematology lecture. Topics to be covered are as follows:

Nuclear Hematology

Nuclear oncology

Biçimlendirilmi : ngilizce (Amerikan)

Silinmi : **ISSUES** [1]

### **4- TEACHING AND LEARNING METHODA OF THE COURSE:**

This course includes lectures and class discussions.

### **5- ASSESSMENT METHODS AND GRADING OF THE COURSE:**

Students are responsible for all issues described in lecture. When necessary, students are directed to the references books. Students are expected to participate regularly in lecture. Students are evaluated on board exams in the end.

### **6- THE LANGUAGE OF INSTRUCTION:**

Turkish.

## 7- ECTS CREDIT ALLOCATION:

### **PATHOLOGY**

#### **1. DESCRIPTION**

This course reviews basic subjects in pathology. After a brief overview of the course, the course deals with pathologic basis of all systems as well as immunologic and molecular and pathophysiological 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 pathology and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiological mechanisms.
- c. **References:**

#### Textbooks

- 1) Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999
- 2) Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996
- 3) Anderson's Pathology; Eds. Damjanov I., Linder J; Tenth Edition, Mosby, 1996
- 4) Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992

#### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

#### **4. TEACHING STAFF**

Eylem Akar, MD (Pathologist)

Hampar Akkaya, MD (Assistant Professor of Pathology)

#### **5. LENGTH AND PERIOD**

This committee includes 6 hours of pathology classes. Topics to be covered are as follows:

[Diseases of the bone marrow](#)

[Diseases of the Lymphoid tissue](#)

[Diseases of the spleen and timus](#)

[Laboratory practices \("Bone marrow, lymphoid tissue, spleen"\)](#)

Silinmi : ¶  
**NUCLEAR ONCOLOGY**¶  
 ¶  
**1-IDENTIFICATION OF THE COURSE:**¶  
 Nuclear Oncology¶  
 ¶  
**2- COURSE DESCRIPTION:**¶  
 This course is designed to provide students with information about nuclear medicine techniques that use the diagnosis and treatment of oncological diseases.¶  
 ¶  
**3-LEVEL OF THE COURSE**¶  
 ¶  
**a. Prerequisites of the Course:** None¶  
**b. Objectives of the Course:** The aim of this course is to teach the useful nuclear medicine methods in diagnosis and treatments of oncological diseases. ¶  
 ¶  
**c. References of the Course:**¶  
 1-Görpe A., Cantez S. (1992). Pratik Nükleer Tıp, İstanbul Tıp Fakültesi Vakfı¶  
 2-Wilson AW. (1998). Textbook of Nuclear Medicine, Lippincott-Raven¶  
 3-Datz FL. (1993). Handbook of Nuclear Medicine, Mosby¶  
 ¶  
**<#>THE STATUS OF THE COURSE:**¶  
 This course is a mandatory course.¶  
 ¶  
**<#>NAME OF THE TEACHING STAFF OF THE COURSE:**¶  
 <#>Esra Arzu Genço lu, MD (Associate Professor of Nuclear Medicine)¶  
**THE PERIOD AND THE PLAN OF THE COURSE:**¶  
 This committee includes 1 hour of Nuclear Oncology lecture. Topics to be covered are as follows:¶  
 ¶  
**ISSUES** ¶  
 ... [2]

Silinmi : B. Handan Özdemir, M.D. (Professor of Pathology)¶

Biçimlendirilmi : Aralık Önce: 0 nk, Satır aralı : 1,5 satır

Biçimlendirilmi : Aralık Önce: 0 nk

Silinmi : ¶  
**.SUBJECTS** ¶  
 ... [3]

Biçimlendirilmi : Satır aralı : tek

**6. TEACHING AND LEARNING METHODS OF THE COURSE**

Third committee includes lectures, class discussions and laboratory practices

Silinmi :

Silinmi :

Biçimlendirilmi : Yazı tipi rengi:

Biçimlendirilmi : Girinti: Sol: 1,27 cm, Madde i aretleri veya numaralandırma yok

**7. ASSESSMENT METHODS OF THE COURSE****8. THE LANGUAGE OF INSTRUCT ON**

Turkish.

**9. LEARNING OUTCOMES:**

Silinmi :

At the end of the module the student is expected to be able to:

- explain the more common reasons for difficult behavior in primary school children in class situations, indicating standard techniques for ameliorating that behavior.

**RADIATION ONCOLOGY**

Biçimlendirilmi : ngilizce (Amerikan)

**1. Identification of the Course**

Radiation Oncology

**2. Course Description**

This course is designed to provide students a brief definition of radiation oncology and its clinical use. In this course, the basic issues about radiation physics, radiobiology and clinical radiation oncology is briefly defined. In radiation physics, the principles of radiation including Gamma rays and X-rays, and the basic working principles of radiation devices are discussed. In radiobiology course, the effects of radiation on tumor and normal tissues are discussed. Finally in clinical radiation oncology, the roles of radiotherapy in certain cancer groups are defined. Since radiotherapy is one of the essential component of cancer treatment, clinical importance of radiotherapy will be emphasized.

**3. Level of the Course****a. Prerequisites of the Course:**

None

**b. Objectives of the Course:**

To teach the basic principles of Radiation Oncology and the clinical importance of radiotherapy is the main objectives of this advanced course.

**c. References of the Course:**

- Halperin EC, Perez CA, Brady LW (2007). Principles and Practice of Radiation Oncology
- Gunderson LL & Teper JE (2007). Clinical Radiation Oncology.

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

Radiation Oncology course is a compulsory course.

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

Hüseyin Cem Önal, M.D. (Associate Professor of Radiation Oncology)

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

Radiation Oncology course is one semester course consisting of 3 hours. The topics to be covered as follows.

- Planning treatment and radiotherapy devices
- Radiation physics and radiobiology
- Clinical radiation oncology

**7. Teaching and Learning Methods of the Course**

This course includes lecture, class discussions and examination.

**8. Assessment Methods and Grading of the Course****Creative Essays**

There is a written examination at the end of the committee. A total of 7 multiple choice questions are asked.

Silinmi : Creative

Biçimlendirilmi : İngilizce (Amerikan)

**9. The Language of Instruction**

Turkish

**10. ECTS Credit Allocation**

## **RADIOLOGY**

### **1. Identification**

-Radiology

### **2. Description**

To impress the usefulness of radiology in the diagnosis of the immunologic system pathologies, and describe some spesific radiological findings in some diseases.

### **3. Level**

To teach the basic level radiological knowledge for using it during their daily clinical practice

### **4. References of the Course**

- Radiology Review Manual,1996 ,Third Edition. Wolfgang Dahnert.
- Klinik radyoloji,2002,Nobel Güne Kitabevi,Ercan Tuncel.

### **5. Compulsory or electivel course units**

TIP 391 is a compulsory course

### **6. Teaching staff**

Fuldem Yıldırım, MD (Associate Professor of Radiology)

### **7. Lenght and period**

Is a course consisting of one lecture in hematologic and immunologic system committee

### **8. Teaching and learning methods**

Include lecture and discussion

### **9. Assesment Methods and Grading of the Course**

Students are tested by multiple choice questions at the end of the course for analysing their knowledge in radiologic diagnosis of immunologic diseases.

### **10. The Language of Instruction**

Turkish

### **11. ECTS credit allocation**

Biçimlendirilmi : ngilizce (Amerikan)

Silinmi : **IN IMMUNOLOGIC DISEASES**

Biçimlendirilmi : ngilizce (Amerikan)

Silinmi : in Immunologic Diseases

Silinmi : n

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

Biçimlendirilmi : ngilizce (Amerikan)

## **MEDICAL ONCOLOGY**

### **DESCRIPTION**

Based on tumor biology and tumor kinetics, general principles of cancer treatment will be described.

#### **1. LEVEL**

**a. Prerequisite:** None

**b. Objectives:** The objective of the course is to describe tumor biology and kinetics to the students and subsequently in the light of this information general principles of cancer treatment and chemotherapeutics used in cancer and their mechanism of action will be discussed.

**c. References:**

##### Textbooks

1) DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology, Eighth Edition 978-0-7817-7207-5

2) Manual of Clinical Oncology Casciato DA, 6th Edition 2008

3) MD Anderson Manual of Medical Oncology by Hagop M. Kantarjian 2006

#### **2. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

#### **3. TEACHING STAFF**

Özgür Özyılkan, MD (Professor of Medical Oncology)

Özden Altunda, MD (Associate Professor of Medical Oncology)

#### **4. LENGTH AND PERIOD**

This course includes 4 hours of lecture. Topics to be covered are as follows:

##### **Committee 4:**

Lesson 1	Oncology; introduction and management of cancer patients
Lesson 2	<u>Non – Hodgkin Lymphoma</u>
Lesson 3	Hodgkin Lymphoma

Lesson 4	Tumour markers
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#### **5. TEACHING AND LEARNING METHODS OF THE COURSE**

This course includes lectures, and class discussions

#### **6. ASSESSMENT METHODS OF THE COURSE**

The students are responsible from al the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures

Biçimlendirilmi : ngilizce (Amerikan)

At the end of each comittee each student will take multi-choice exam.

#### **7. THE LANGUAGE OF INSTRUCTION**

Turkish.

#### **8. LEARNING OUTCOMES**

At the end of the course, the student is expected to be able to understand general principles of cancer treatment based on tumor biology and kinetics.

Biçimlendirilmi : ngilizce (Amerikan)

**I. Identification of the course:****ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE****2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

**3. Level:** 345**a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

**c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

**4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

Biçimlendirilmi : nglizce (Amerikan)

### 5. Teaching Staff

Selda Erdem Çekiç

Biçimlendirilmi : nglizce (Amerikan)

### 6. Length and Period

Is a two-semester course 3 hours per week

Biçimlendirilmi : nglizce (Amerikan)

Committees	Contents
<b>Committee 1.</b> 08.09.-17-10 (12 hours)	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b> 20.10-01.12 (9 hours)	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM- Vocabulary Test, synonyms-Translation from Turkish to English- Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b> 02.12. 26.12 (9 hours)	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM- Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b> 29-12-16.01 (9 hours)	The healing power of Listening in the ICU-an article from NEJM- Vocabulary studies-Consent for Organ Donation, article from NEJM- Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b> 02.02-04.03 12 hours	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b> 05.03-25.03 (6 hours)	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b> (9 hours) 26.03-21 April (9 hours)	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b> 22.04-12.05 (9 hours)	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b>	Autism, a reading from ÜDS-A test on some confusing words-

14.05-12-06 (9 hours)	Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.
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**7. Teaching and Learning Methods**

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

**8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

ISSUES	TOPIC
1-Nuclear Medicine	Nuclear Hematology, E.Arzu Genço lu

## **NUCLEAR ONCOLOGY**

### **1-IDENTIFICATION OF THE COURSE:**

Nuclear Oncology

### **2- COURSE DESCRIPTION:**

This course is designed to provide students with information about nuclear medicine techniques that use the diagnosis and treatment of oncological diseases.

### **3-LEVEL OF THE COURSE**

**a. Prerequisites of the Course:** None

**b. Objectives of the Course:** The aim of this course is to teach the useful nuclear medicine methods in diagnosis and treatments of oncological diseases.

**c. References of the Course:**

- 1-Görpe A., Cantez S. (1992). Pratik Nükleer Tıp, stanbul Tıp Fakültesi Vakfı
- 2-Wilson AW. (1998). Textbook of Nuclear Medicine, Lippincott-Raven
- 3-Datz FL. (1993). Handbook of Nuclear Medicine, Mosby

### **THE STATUS OF THE COURSE:**

This course is a mandatory course.

### **NAME OF THE TEACHING STAFF OF THE COURSE:**

Esra Arzu Genço lu, MD (Assocaite Professor of Nuclear Medicine)

### **THE PERIOD AND THE PLAN OF THE COURSE:**

This committee includes 1 hour of Nuclear Oncology lecture. Topics to be covered are as follows:

ISSUES	TOPIC
1-Nuclear Medicine	Nuclear Oncology- E.Arzu Genço lu

### **TEACHING AND LEARNING METHOD OF THE COURSE:**

This course includes lectures and class discussions.

### **ASSESSMENT METHODS AND GRADING OF THE COURSE:**

Students are responsible for all issues described in lecture. When necessary, students are directed to the references books. Students are expected to participate regularly in lecture. Students are evaluated on board exams in the end.

### **THE LANGUAGE OF INSTRUCTION:**

Turkish.

### **ECTS CRED T ALLOCATION:**

**SUBJECTS**

1- Diseases of the bone marrow	Pathology of the diseases of the bone marrow,
2- Diseases of the Lymphoid tissue	Pathology of the lymphoid tissue
3- Diseases of the spleen and timus	Pathology of the spleen and timus,
4- Laboratory practices	“Bone marrow, lymphoid tissue, spleen”

<b>Name</b>	6 <sup>th</sup> Committee: ENDOCRINE SYSTEM, OBSTETRICS AND GYNECOLOGY
<b>Status</b>	Compulsory
<b>ECTS credits</b>	7,4
<b>Responsibility</b>	Doç. Dr. Gö en Önalın
<b>Prerequisite</b>	None
<b>Period</b>	5 weeks, 115 hours
<b>Content</b>	This course includes lectures on function and disease of endocrine glands, malign and benign diseases of female reproductive system, female reproductive dysfunction and therapeutic approaches, contraceptive methods
<b>Objectives</b>	<p>The aim of this course is to give the basic as well as the current theoretical information about gynecological diseases and obstetrics, to the medical students.</p> <p>Objective of the course is also to give basic concepts, diagnostic and therapeutic approaches in endocrinological diseases.</p> <p>To familiarize the students with the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse effects of the drugs used in endocrine and metabolic diseases and the pharmacology of the drugs used in obstetrics and gynaecology.</p>
<b>Learning Outcomes</b>	<p>At the end of the course the students must understand the importance of antenatal follow-up and the follow-up of labor, and must be able to summarize the management of the problems which may occur during this period; they must recognize the diseases of female genital tract, and starting with the menstrual cycle physiology they must be able to explain the development of normal pregnancy, contraception, infertility and menopause.</p> <p>The students must recognize the endocrinological diseases and must be able to summarize the management of these diseases.</p> <p>The students should explain the pharmacokinetic, pharmacodynamic properties, action mechanisms and the adverse and toxic effects of the drugs used in the medical (pharmacological) treatment of endocrine and metabolic diseases. In addition, the student is expected to discuss the pharmacology of the drugs used in obstetrics and gynaecology.</p>
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. Reece EA, Hobbins JC (eds). Clinical Obstetrics, The Fetus &amp; Mother; 3. Ed., Massachusetts, Blackwell Publishing, 2007.</li> <li>2. DeCherney AH, Nathan L, Goodwin TM, Laufer N (eds). Current Diagnosis &amp; Treatment Obstetrics &amp; Gynecology; 10. Ed., USA, McGraw-Hill Companies, 2007.</li> <li>3. Berek JS (ed). Novak's Gynecology; 13. Ed., Philadelphia, Lippincott Williams &amp; Wilkins, 2002.</li> <li>4. Speroff L, Fritz MA (eds). Clinical Gynecologic Endocrinology and Infertility; 7. Ed., Philadelphia, Lippincott Williams &amp; Wilkins, 2005.</li> <li>5. Cunningham FG, Leveno KJ, Bloom SL, Hauth JC, Gilstrap III LC, Wenstrom KD (eds). Williams Obstetrics; 22. Ed.,</li> </ol>

	USA, McGraw-Hill Companies, 2005.
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical (%95), Medical English (%5)
<b>Language</b>	Turkish

## **PHASE III**

### **COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”**

#### **1. IDENTIFICATION**

#### **OBSTETRICS AND GYNECOLOGY**

#### **2. DESCRIPTION**

Antenatal follow-up and labor, and the problems one may face with during this period; benign and malignant diseases of the female genital tract, diagnostic and treatment aids; physiological and pathological states regarding the menstrual cycle and its control constitute the subjects of this course.

#### **3. LEVEL**

**a. Prerequisite:** None.

**b. Objectives:** The aim of this course is to give the basic as well as the current theoretical information about gynecological diseases and obstetrics, to the medical students.

**c. Learning Outcomes:** At the end of the course the students must understand the importance of antenatal follow-up and the follow-up of labor, and must be able to summarize the management of the problems which may occur during this period; they must recognize the diseases of female genital tract, and starting with the menstrual cycle physiology they must be able to explain the development of normal pregnancy, contraception, infertility and menopause.

**d. References**

Reece EA, Hobbins JC (eds). Clinical Obstetrics, The Fetus & Mother; 3. Ed., Massachusetts, Blackwell Publishing, 2007.

DeCherney AH, Nathan L, Goodwin TM, Laufer N (eds). Current Diagnosis & Treatment Obstetrics & Gynecology; 10. Ed., USA, McGraw-Hill Companies, 2007.

Berek JS (ed). Novak's Gynecology; 13. Ed., Philadelphia, Lippincott Williams & Wilkins, 2002.

Speroff L, Fritz MA (eds). Clinical Gynecologic Endocrinology and Infertility; 7. Ed., Philadelphia, Lippincott Williams & Wilkins, 2005.

Cunningham FG, Leveno KJ, Bloom SL, Hauth JC, Gilstrap III LC, Wenstrom KD (eds). Williams Obstetrics; 22. Ed., USA, McGraw-Hill Companies, 2005.

#### **4. MANDATORY OR OPTIONAL COURSE**

This course is mandatory.

#### **5. TEACHING STAFF**

Prof. Ali Ayhan, MD.

Prof. Ali Haberal, MD

Prof. Esra Kuçu, MD.

Prof. Hulusi Bülent Zeyneloğlu, MD.

Prof. Filiz F. Yank, MD.

Assoc. Prof. Gönen Önalın, MD.

Assoc. Prof. Polat Dursun, MD.

## 6. LENGTH AND PERIOD

This course requires 20 hours within a committee lasting 5 weeks. The subjects included are as follows:

HOUR	SUBJECT
1	Neuroendocrine control of the menstrual cycle
2	Anatomy of the pelvis and female genital tract
3	Basic principles of antenatal follow-up and examination of a pregnant woman
4	Maternal and fetal physiology in pregnancy
5	Fertilization and implantation
6	Reproductive immunology
7	Endocrinology of pregnancy
8	Physiology of normal labor and delivery
9	Physiological changes in puerperium
10	A general overview of pregnancy complications (2 hours)
11	Amenorrhea
12	A general overview of contraception
13	Symptoms of gynecologic diseases (abnormal bleeding, vaginal discharge, pruritus, pelvic pain)
14	Epidemiology of genital system infections and preventive measures
15	A general overview of gynecological cancers and their epidemiology
16	Etiology and pathogenesis of preinvasive and invasive lower genital system cancers
17	Physiology of menopause
18	Etiology and pathogenesis of uterine and ovarian neoplasias
19	Etiopathogenesis of gestational trophoblastic neoplasias

## 7. TEACHING AND LEARNING METHODS

Interactive lectures using visual aids.

## 8. ASSESSMENT

Written examination at the end of the committee (multiple choice questions).

## 9. LANGUAGE

The language of this course is Turkish.

## **PHASE III**

### **COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”**

#### **1. IDENTIFICATION** **ENDOCRINOLOGY**

#### **2. DESCRIPTION**

In this course, we will review the major concepts in endocrinology. Within this respect, pathophysiology of diseases, diagnostic criteria and therapeutical considerations will be discussed in an interactive approach.

#### **3. LEVEL:**

- a. **Prerequisite:** None
- b. **Objective:** Objective of the course is to give basic concepts, diagnostic and therapeutical approaches in endocrinological diseases. Besides formal information, ethical, deontological aspects and patient-doctor relations will be discussed
- c. **Learning Outcomes:** At the end of the course the students must recognize the endocrinological diseases and must be able to summarize the management of these diseases.

#### **d. References:**

##### Textbooks:

- Williams Textbook of Endocrinology, 2008.
- DeGroot Endocrinology textbook
- Cecil Textbook of Internal Medicine
- Harrison Textbook of Internal Medicine
- Endocrinology and Metabolism Medical Clinics of North America

#### **4. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

#### **5. TEACHING STAFF:**

Prof. Dr. Nilgün Güvener Demira , MD  
Prof.Neslihan Ba cıl Tütüncü, MD.  
Assoc Prof.Aslı Nar, MD.  
Assoc Prof. Eda Ertörer, MD  
Okan Sefa Bakıner, M.D. Assistant Prof.  
Emre Bozkırlı, M.D. Assistant Prof.  
Özlem Tarçın, M.D. Assistant Prof.

#### **6. LENGTH AND PERIOD:**

This course requires 24 hours within a committee lasting 5 weeks. The subjects included are as follows:

<b>SUBJECTS</b>	
<b>1</b>	Hormones and hormone action
<b>2</b>	Diseases of hypothalamus
<b>3</b>	Anterior pituitary gland
<b>4</b>	Posterior pituitary gland
<b>5</b>	Formation and secretion of thyroid hormones
<b>6</b>	Thyroid hormone in peripheral tissues and thyroid function tests
<b>7</b>	Simple goiter
<b>8</b>	Thyrotoxicosis and thyroiditis
<b>9</b>	Thyroid neoplasia
<b>10</b>	Mineral metabolism
<b>11</b>	Tip 1 Diabetes mellitus : Etiopathogenesis
<b>12</b>	Tip 2 Diabetes mellitus : Etiopathogenesis
<b>13</b>	Diabetes mellitus: Clinical Diagnosis
<b>14</b>	Diabetes mellitus: Acute complications
<b>15</b>	Diabetes mellitus: Chronic complications ( <b>2 hours</b> )
<b>16</b>	Diabetes mellitus: Treatment ( <b>2 hours</b> )
<b>17</b>	Adrenal Gland: Physiology of adrenal hormones
<b>18</b>	Adrenal Gland: Diseases of adrenal medulla
<b>19</b>	Adrenal Gland: Diseases of adrenal cortex
<b>20</b>	Multiple organ neoplasia
<b>21</b>	Obesity, anorexia nervosa, bulimia nervosa
<b>22</b>	Metabolic bone diseases ( <b>1 hours</b> )

#### **7. TEACHING AND LEARNING METHODS:**

This course will consist of lectures and class discussions.

#### **8. ASSESSMENT:**

Students will be responsible from the lectures and the textbooks. They are expected to attend classes regularly. They are expected to read the subjects previously to participate to class discussions. They will be evaluated according to their performance during class discussions and exam.

#### **9. LANGUAGE:**

Language of the course is Turkish.

## PHASE III

### COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”

#### 1. IDENTIFICATION

#### PATHOLOGY

#### 2. DESCRIPTION

This course reviews basic subjects in pathology. After a brief overview of the course, the course deals with pathologic basis of all systems as well as immunologic and molecular and pathophysiologic mechanisms of diseases.

#### 3. LEVEL

- a. **Prerequisite:** None
- b. **Objectives:** The objective of the course is to familiarize students with the basic concepts and nomenclature in pathology and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms.
- c. **Learning Outcomes:** At the end of this course the student is expected to be able to explain the basic etiopathogenetic and morphologic features of endocrine diseases and diseases of the female genital tract.
- d. **References:**

#### Textbooks

- 1) Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999
- 2) Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996
- 3) Anderson's Pathology; Eds. Damjanov I., Linder J; Tenth Edition, Mosby, 1996
- 4) Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992

#### 4. MANDATORY OR OPTIONAL COURSE

This course is a mandatory course

#### 5. TEACHING STAFF

Prof. B. Handan Özdemir, MD.  
Assoc. Prof. Özlem Özen, MD.  
Assoc. Prof. Nihan Haberal Reyhan, MD.  
Assoc. Prof. Filiz Aka Bolat, MD.  
Assistant Prof. Ebru Demiralay, MD.  
Assistant Prof. Emrah Koçer, MD.  
ebnem Ayva, MD.

Ay en Terzi, MD.

#### **6. LENGTH AND PERIOD**

This committee lasting 5 weeks includes 16 hours of pathology classes. Topics to be covered are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	Pituitary gland and sellar pathology
<b>2</b>	Pathology of the thyroid and parathyroid diseases
<b>3</b>	Pathology of the thyroid and parathyroid neoplasias
<b>4</b>	The pathology of placenta
<b>5</b>	The pathology of endocrine pancreas diseases
<b>6</b>	Pathology of the Diabetes Mellitus
<b>7</b>	The pathology of the adrenal gland diseases
<b>8</b>	Practice hour; The pathology of endocrine diseases
<b>9</b>	Pathology of vulvar and vaginal diseases
<b>10</b>	Pathology of cervical diseases
<b>11</b>	Pathology of the breast diseases ( <b>2 hours</b> )
<b>12</b>	Pathology of the diseases of the uterus
<b>13</b>	Pathology of the diseases of the ovary
<b>14</b>	Practice hour; Gynecological pathology ( <b>2 hours</b> )

#### **7. TEACHING AND LEARNING METHODS:**

This committee includes lectures, class discussions and laboratory practices

#### **8. ASSESSMENT**

At the end of the committee a test including multiple choice questions is performed.

#### **9. LANGUAGE**

Turkish.

## PHASE III

### COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”

#### 1. IDENTIFICATION

#### PHARMACOLOGY

#### 2. DESCRIPTION

This course involves the theoretical pharmacology lectures reviewing the therapeutic approach to endocrine and metabolic diseases and disorders of female reproductive system which also reviews the pharmacokinetic and pharmacodynamic properties, action mechanisms, adverse and toxic effects of the drugs used in the treatment of endocrine and metabolic diseases and disorders of female reproductive system, and contraceptive drugs.

#### 3. LEVEL

- a. **Prerequisite:** None except for being successfully promoted from Phase II.
- b. **Objectives:** The first objective of the course is to familiarize the students with the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse effects of the drugs used in endocrine and metabolic diseases. The second objective is to focus on the pharmacology of the drugs used in obstetrics and gynaecology.
- c. **Learning Outcomes:** At the end of the PHARMACOLOGY course, the students should explain the pharmacokinetic, pharmacodynamic properties, action mechanisms and the adverse and toxic effects of the drugs used in the medical (pharmacological) treatment of endocrine and metabolic diseases. In addition, the student is expected to discuss the pharmacology of the drugs used in obstetrics and gynaecology.
- d. **References:**

Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.

Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman’s The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.

Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman’s Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.

Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.

Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.

Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.

Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

#### **4. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

#### **5. TEACHING STAFF**

Prof. Meral Tuncer, MD

Prof. . Remzi Erdem, MD.

Assist Prof. T. Re at Aydos, MD

#### **6. LENGTH AND PERIOD**

This course requires 14 hours within a committee lasting 5 weeks. Topics to be covered are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	Pharmacology and pharmacokinetic properties of hormones
<b>2</b>	Pharmacology of hypothalamo-pituitary hormones
<b>3</b>	Pharmacology of gonadol hormones
<b>4</b>	Pharmacology of thyroid hormones
<b>5</b>	Drugs used in hypocalcaemia and hypercalcaemia
<b>6</b>	nsulin
<b>7</b>	Oral antidiabetic agents
<b>8</b>	Glucocorticoids
<b>9</b>	ACTH and mineralocorticoids
<b>10</b>	Oral contraceptives

#### **7. TEACHING AND LEARNING METHODS**

MED 342-PHARMACOLOGY course will consist of lectures, class discussions.

#### **8. ASSESSMENT**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED 342-PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

#### **9. LANGUAGE**

The language of the course is Turkish.

## **PHASE III**

### **COMMITTEE 6 ‘ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY’**

#### **1. IDENTIFICATION** **MEDICAL GENETICS**

2. **DESCRIPTION :** After the completion of this lecture, students will have knowledge of sex chromosome structure and functions, prenatal genetic diagnosis methods and approach to the patient with genetic disease

#### **3. LEVEL**

a. **Prerequisite:** None

b. **Objective:** To help the students understand the basic mechanisms in the sex differentiation and the practical aspects of prenatal genetic screening, testing and diagnosis to make appropriate and on time approach the genetic disease.

c. **Learning Outcomes:** We believe that this lecture will be helpful to give a brief overview on the basic concepts of reproductive genetics for the students in earning to talent in interpreting, comparing, distinguishing for the aspect of genetic disease and genetic testing results.

#### **d. References:**

1. Nussbaum RL, McInnes RR, Willard HF, Thompson MW (2007) Thompson & Thompson genetics in medicine, 7th Ed. Philadelphia: Saunders/Elsevier.
2. Simpson JL., Elias S. 2003 “Genetics in Obstetrics and Gynecology” 3rd ed. Saunders Company, Philadelphia.
3. Turnpenny P., Ellard S., 2007 “Emery’s Elements of Medical Genetics” 13th ed, Churchill Livingstone Elsevier.

#### **4. MANDATORY OR OPTIONAL COURSE**

It is a compulsory course.

#### **5. TEACHING STAFF**

Assoc. Prof.Zerrin Yılmaz Çelik, MD.

#### **6. LENGTH AND PERIOD**

This course requires 6 hours within a committee lasting 5 weeks. The subjects included are as follows:

<b>HOURL</b>	<b>SUBJECT</b>
<b>1</b>	Prenatal diagnosis of genetic diseases ( <b>2 hours</b> )
<b>2</b>	Disorders of sex chromosome ( <b>2 hours</b> )
<b>3</b>	Genetic counselling ( <b>2 hours</b> )

#### **7. TEACHING AND LEARNING METHODS**

The course will consist of lectures and class discussions.

**8. ASSESSMENT**

The coordination office through test examinations evaluates students.

**9. LANGUAGE**

The language of the course is Turkish.

## PHASE III

### COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”

#### 1. IDENTIFICATION

##### PEDIATRIC ENDOCRINOLOGY

#### 2. DESCRIPTION

In this period, students familiarize basic concepts in pediatrics such as puberty, hypoglycemia, proteinuria, and metabolic diseases. Also, common diseases and diseases concerning subspecialties in pediatrics are introduced to the students. Education will be constructed to subjects concerning both basic concepts and subspecialty areas in pediatrics. The lectures concerning child health and disease will be linked to pre-clinic basic science such as physiology, immunology and genetics. The education in this period is only theoretical. These lessons are provided by our full-time faculty professionals.

#### 3. LEVEL

- a. **Prerequisite:** None.
- b. **Objectives:** In this program, our aim is to familiarize and introduce students with basic concepts in child health and diseases. Common diseases such as anemia and urinary tract infections will be given theoretically. This period also include lectures concerning subspecialties such as Familial Mediterranean Fever (FMF) and intersexuality.
- c. **Learning Outcomes:** The students will use the knowledge they obtain from this brief overview on the basic concepts of puberty, hypoglycemia and congenital metabolic disorders, and will be able to differentiate the causes of some of the problems which they may come across with in the childhood period.
- d. **References:**

1. Behrman RE, Kliegman RM, Jenson HB. (2004) Nelson Textbook of Pediatrics. 17<sup>th</sup> Edition. W.B. Saunders Company, Philadelphia.
2. Hay WW, Hayward AR, Levin MJ, Sondheimer JM. (2003) Current Pediatric Diagnosis & Treatment. 16<sup>th</sup> International edition. Lange Medical Books, McGraw-Hill Companies Inc., NY.
3. Rudolph CD, Rudolph AM. (2002) Rudolph’s Pediatrics. 21<sup>st</sup> International Edition, McGraw-Hill Companies Inc., NY.
4. Barratt TM, Avner ED, Harmon WE. (1999). Pediatric Nephrology. 4<sup>th</sup> Edition. Lippincott Williams & Wilkins, Pennsylvania.
5. Cassidy JT, Petty RE. (2001) Textbook of Pediatric Rheumatology. 4<sup>th</sup> Edition. W.B Saunders Company, Philadelphia.

6. Lanzkowsky MB. (2000) Manual of Pediatric Hematology and Oncology. 4<sup>th</sup> Edition. Academic press, San Diego, California.

7. Sperling MA. (2008) Pediatric Endocrinology, 3<sup>rd</sup> Edition. W.B Saunders Company, Philadelphia.

8. Lifshitz (2007) Pediatric Endocrinology, 5<sup>th</sup> Edition.

#### **4. MANDATORY OR OPTIONAL COURSE**

This is a mandatory course.

#### **5. TEACHING STAFF**

Assoc. Prof. Sibel Kınık, MD.

#### **6. LENGTH AND PERIOD**

This course requires 2 hours within a committee lasting 5 weeks. The subjects included are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	ntersexuality
<b>2</b>	Hypoglycemia

#### **7. TEACHING AND LEARNING METHODS**

The education in this period is only theoretical.

#### **8. ASSESSMENT**

Students will be responsible from all lecture topics. Students must be attended at least 90 % of all lesson. At the end of this course, final degree is determined by result of a multiple choice written examination. Sixty points must be required for the student who is successful.

#### **9. LANGUAGE**

Language of the education is Turkish.

## PHASE III

### COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”

#### 1. IDENTIFICATION

#### GENERAL SURGERY

#### 2. DESCRIPTION

This course reviews basic subjects in general surgery. After a brief overview of the course, the course deals with surgical principles as well as trauma and surgical implications of systemic diseases. The subjects are introduction to general surgery.

#### 3. LEVEL

- a. **Prerequisite:** None.
- b. **Objectives:** The first objective of the course is to familiarize students with the basic concepts and nomenclature in surgery. The second objective is to help students to learn how to search for more information in literature.
- c. **Learning Outcomes:** At the end of the course the students will be able to summarize the basic surgical principles in the treatment of thyroid and parathyroid diseases, adrenal tumors and breast diseases.
- d. **References:**

#### Textbooks

1. Schwartz SI, Shires TG, Spencer FC, Daly JM, Fischer JE, Galloway AC. Principles of Surgery. 1999, McGraw-Hill, USA.
2. Townsend CM, Harris JW. Sabiston Textbook of Surgery. 2001, 17th ed. WB Saunders Comp, USA.
3. Wilmore DW, Cheung LY, Harken AH, Holcroft JW, Meakins JL, Soper NJ. American College of Surgeons ACS Surgery Principles and Practice. 2002, WebMD Corp., USA.

#### 4. MANDATORY OR OPTIONAL COURSE

This course is a mandatory course.

#### 5. TEACHING STAFF

Prof. Gökhan Moray, MD.

Prof. Sedat Yıldırım, MD.

Assoc. Prof. Yahya Ekici, MD.

#### 6. LENGTH AND PERIOD

This course requires 4 hours within a committee lasting 5 weeks. The subjects included are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	Surgical treatment of thyroid and parathyroid diseases
<b>2</b>	Surgical treatment of adrenal tumors
<b>3</b>	Benign diseases of breast
<b>4</b>	Malignant diseases of breast

#### **7. TEACHING AND LEARNING METHODS**

The course will consist of lectures and class discussions.

#### **8. ASSESSMENT**

Students will be responsible from all lectures. Class participation is a vital component of this course. Students are expected to attend classes regularly. At least 90 % attendance is required. Students are expected to read the assigned material in advance to be ready to participate to class discussions. There will be a final exam. The final exam will cover all topics.

#### **9. LANGUAGE**

The language of the course is Turkish.

## PHASE III

### COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”

#### 1. IDENTIFICATION

#### RADIOLOGY

#### 2. DESCRIPTION

Diagnostic Radiology courses consist of two major groups. First group is mainly dealing with diagnostic modalities such as x-ray, mammography, ultrasound, MRI, CT. and angiography, particularly with their technical and physical aspects.

Second group of courses are involved Radiological diagnosis of various organ and system disorders such as neuroradiology, chest radiology, cardiovascular radiology, abdominal and gastrointestinal radiology, urology, musculoskeletal radiology, radiology of OBS/GYN and endocrine disorders, radiology of the breast and male genital disorders.

#### 3. LEVEL

- a. **Prerequisite:** None
- b. **Objectives:** With these courses it is intended to make familiarize and accustomed the medical students with the diagnostic modalities and provide core knowledge about technical properties, clinical indications and algorithm of radiological examinations, image interpretation of the radiographical appearances of various disease conditions.
- c. **Learning Outcomes:** At the end of the courses the students must be able to summarize the pathological images observed in the basic radiological work-up of endocrine diseases, breast diseases and gynecological diseases.
- d. **References:**

#### Textbooks

Charles E. Putman (1994); Textbook of Diagnostic Imaging, W.B. Saunders Company, Philadelphia, 2nd ed.

Silverman FN, Kuhn JP (1993) Caffey's Pediatric X-Ray Diagnosis, 9th edition, Mosby.  
Saadoon Kadir (1986); Diagnostic Angiography. Saunders Company 1st edition.

Stanley Baum (1997); Abram's Angiography, vascular and interventional radiology. Little, Brown and Company. Fourth edition.

Kirks, Donald R. (1991) Practical Pediatric Imaging. Diagnostic Radiology of infants and children, Little, Brown and Company

Dahnert Wolfgang (1999) Radiology Review Manual, Williams & Wilkins.

Moss A.A. (1992) Computed Tomography of Body with Magnetic Resonance Imaging. 2nd edition, W.B. Saunders Company

Rumack Carol M, Wilson Stephanie R, Charboneau J William. Diagnostic Ultrasound. Second edition, Mosby, 1997.

Tuncel E. Klinik radyoloji. kinci baskı, Nobel ve Güne , 2002.: leti im, 3. baskı.  
Richard E. Latchaw. MR and CT Imaging of the head, neck and spine. Mosby Year Book. Second Edition. 1991, St.Louis. Volume 1-2

Scott W. Atlas. Magnetic Resonance Imaging of the Brain and Spine. Second Edition. 1996, Philadelphia, Lippincott, Raven.

Ramsey Ruth. Nuroradiology. Second Edition. 1987, Philadelphia, W.B Saunders Company.

A.James Barkowich. Pediatric Neuroimaging. Third Edition. 2000, Philadelphia, Lippincott, Williams&Wilkins.

Dawid Sutton. Textbook of Radiology and Imaging. Section 6: Head and neck; CNS; recent technical advances. 1489-1819, Volume 2. Seventh Edition. Churchill Livingstone, 2003.

Bushong Stewart C. (1997) Radiologic Science For Technologist Physics, Biology and Protection, 6.th edition Mosby- Year Book nc.

#### Supplementary Reading list

Vaughan ED Jr. Diseases of the adrenal gland. Med Clin North Am. 2004 Mar; 88(2):443-66

Kidwai A. Griffiths HJ. Radiologic case study. Secondary hyperparathyroidism, osteomalacia with a pseudofracture, and amyloid deposition. Orthopedics. 2003 Jun;26(6):618, 665-6.

Satoh A, Ligaya T. Multiple endocrine neoplasia type 1 with pyonephrosis. Int J Urol. 2002 Jul;9(7):402-4.

Kirsten D. The thyroid gland: physiology and pathophysiology. Neonatal Netw. 2000 Dec;19(8):11-26.

#### **4. MANDATORY OR OPTIONAL COURSE**

These courses are mandatory.

#### **5. TEACHING STAFF**

Assoc. Prof. Nihal Uslu, MD.

#### **6. LENGTH AND PERIOD**

This course requires 2 hours within a committee lasting 5 weeks. The subjects included are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	Radiology of endocrine system diseases
<b>2</b>	Imaging in obstetrics and gynecology

#### **7. TEACHING AND LEARNING METHODS**

These courses will consist of lectures, class discussions and reading assignments.

#### **8. ASSESSMENT**

Class participation is a vital component of these courses. Students are expected to attend classes regularly. At least 80 % attendance is required.

Students are required to read previously given texts. Students are encouraged to make extra readings particularly the assigned material in advance.

There will be 9 intermediate exams related to each topic. Final exam will cover all topics.

#### **9. LANGUAGE**

The language of the course is Turkish.

## **PHASE III**

### **COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”**

#### **1. IDENTIFICATION**

#### **FORENSIC MEDICINE**

#### **2. DESCRIPTION**

Forensic medicine is an area of medicine that attempts to enlighten problems that have medical content with legal qualities that are faced by legal authorities. Questions and problems related to gynecology and obstetrics are frequently encountered in the practice of forensic medicine. In our country any medical faculty graduate and Turkish citizen can be assigned the duty of being an expert physician. In addition every physician has the possibility of facing forensic cases in their clinical practice in whatever their area of specialty is. Because the number of consultant physicians working in the area of forensic medicine is small in our country, the responsibilities of physicians in other areas of specialty are increasing.

Sexual violence against women has been given distinct importance in our laws and the punishments have been increased for unjust (illegal) actions that are carried out against women during pregnancy, accepted as being related to the continuation of the family line. Diagnosis, consequences, evidences and related legal regulations of violence against woman discussed on forensic approach.

Lesson contents include: Accepting legal regulations for the protection of women, legal aspects of cases related to the area of women’s diseases and obstetrics; what can happen in court cases, discussion of the physician’s professional responsibilities in this area.

Principally, legal problems related to pregnancy, pregnancy resulting from unlawful action, determination of father; legal problems related to determining pregnancy in women of childbearing age; legal problems related to trauma in pregnancy; prenatal, natal and postnatal maternal death; legal problems related to birth; legal problems related to abortion and criminal abortion are taught.

The importance of gynecologic examination is emphasized in legal cases that are faced by physicians; how to determine signs of trauma in living and dead women during prenatal, natal and postnatal periods and how to transfer these onto legal reports are discussed. Injury that can occur to the fetus with trauma in pregnancy and methods that can be used to determine these injuries are explained theoretically. In cases of abortion information on the subject of legal and criminal abortion is given and examples of criminal methods of abortion frequently encountered in our country are given to illustrate methods of researching to determine these and examination findings.

The teaching will include where the evidence that will shed light on legal cases that the students face is obtained, how it is collected, how it is recorded, protected and transported, how it will be interpreted and how its relationship with legal concepts will be formed, such as causality.

The basic purpose of legal examination is to collect evidence and to transfer it to legal authorities in a manner that it can be used in legal evaluation of the conclusions that are made in light of the evidence. In our lessons by discussing examples of legal reports the necessity for knowing how to reflect the findings obtained onto the legal report is discussed.

### 3. LEVEL

- a. **Prerequisite:** None.
- b. **Objectives:** The goal of the lesson is for the students to learn forensic medicine approaches to cases related to women's illnesses and obstetrics and in legal cases to gain skills in examination and other methods for obtaining evidence.
- c. **Learning Outcomes:** We hope that after this class the students will gain skill for collecting evidence and writing a forensic expertise report.
- d. **References:**

#### Textbooks and Thesis :

- 1- Adli obstetrik ve jinekoloji (Forensic Gynecology and Obstetric) Cilt 1. -Cilt 2., Soysal Z. (Ed), Adli Tıp Kurumu Yayınları -9, İstanbul 2003.
- 2- Adli Tıp ( Forensic Medicine) Cilt1.- Cilt2. – Cilt3., Soysal Z., Çakalır C., (Ed), İstanbul Üniversitesi Cerrahpa a Tıp Fakültesi Yayınlarından, Rektörlük No: 4165, Fakülte No: 224 İstanbul 1999.
- 3- Türk Ceza Kanunu [Turkish Penal Code] Kanun Numarası: 5237, Kabul Tarihi: 26/09/2004, Yayımlandı ı Resmi Gazete Tarih: 12/10/2004, Yayımlandı ı Resmi Gazete Sayısı: 25611
- 4- Nüfus Planlaması Hakkında Kanun [The Rule of Population Regulation] Kanun Numarası: 2827, Kanun Kabul Tarihi: 24/05/1983, Yayımlandı ı Resmi Gazete Tarihi: 27/05/1983, Yayımlandı ı Resmi Gazete Sayısı: 18059
- 5- RAH M TAHL YES VE STER L ZASYON H ZMETLER N N YÜRÜTÜLMES VE DENETLENMES NE L K N TÜZÜK [Legislation of Legal Abortus] Bakanlar Kurulu Karar Tarihi - No: 14/11/1983 - 83/7395, Dayandı ı Kanun Tarihi - No: 24/05/1983 – 2827, Yayımlandı ı Resmi Gazete Tarihi - No: 18/12/1983 - 18255
- 6- Büken B. Anne Ölümünün Adli Tıp Açısından ncelenmesi (An examination of Maternal Deaths from a legal standpoint), İstanbul: Türkiye Cumhuriyeti Adalet Bakanlığı ı Adli Tıp Kurumu Ba kanlı ı ( The Council of Forensic Medicine of the Ministry of Justice in Turkey), Uzmanlık Tezi.
- 7- Büken E. 1990-2000 Yıllarında Adli Tıp Kurumu Birinci ve ikinci htisas Kurullarına Obstetrik ve Jinekolojik Tıbbi Uygulama Hatası ddiısıyla Gönderilen Olguların Adli Tıp Açısından rdelenmesi ( Obstetric and gynecologic malpractice in Turkey). Adli Tıp Kurumu, Uzmanlık Tezi, İstanbul 2002.

#### Articles :

- 1- Büken E, Büken No, Büken B. Obstetric and gynecologic malpractice in Turkey: incidence, impact, causes and prevention. *Journal of Clinical Forensic Medicine, Volume 11, Issue 5, October 2004, Pages 233-247*
- 2-- Ergöner AT, ÖzdemirMH, Can O, Sönmez E, SalaçınS, Berbero lu E, Demir N. Domestic violence on pregnant women in Turkey. *Journal of Forensic and Legal Medicine, Volume 16, Issue 3, April 2009, Pages 125-129*
- 3- Yıldızhan R, Adali E, Kolusari A, Kurdoglu M, Yıldızhan B, Sahin G. Domestic violence against infertile women in a Turkish setting. *International Journal of Gynecology & Obstetrics, Volume 104, Issue 2, February 2009, Pages 110-112*

4- Canetto SS. Women and Suicidal Behavior: A Cultural Analysis. *American Journal of Orthopsychiatry*, Volume 78, Issue 2, April 2008, Pages 259-266

**4. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

**5. TEACHING STAFF**

Assoc. Prof. Erhan Büken, MD.

**6. LENGTH AND PERIOD**

This course requires 3 hours within a committee lasting 5 weeks. The subjects included are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	Forensic aspects of obstetric and gynecological examination ( <b>3 hours</b> )

**7. TEACHING AND LEARNING METHODS**

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

**8. ASSESSMENT**

The coordination office through test examinations evaluates students.

**9. LANGUAGE**

The language of the course is Turkish.

## **PHASE III**

### **COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”**

#### **1. IDENTIFICATION**

##### **MEDICAL ONCOLOGY**

#### **2. DESCRIPTION**

Based on tumor biology and tumor kinetics, general principles of cancer treatment will be described.

#### **3. LEVEL**

- a. **Prerequisite:** None.
- b. **Objectives:** The objective of the course is to describe tumor biology and kinetics to the students and subsequently in the light of this information general principles of cancer treatment and chemotherapeutics used in cancer and their mechanism of action will be discussed.
- c. **Learning Outcomes:** At the end of the course, the student is expected to be able to understand general principles of cancer treatment based on tumor biology and kinetics.
- d. **References:**

##### Textbooks

- 1) DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology, Eighth Edition 978-0-7817-7207-5
- 2) Manual of Clinical Oncology Casciato DA, 6th Edition 2008
- 3) MD Anderson Manual of Medical Oncology by Hagop M. Kantarjian 2006

#### **4. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

#### **5. TEACHING STAFF**

Prof. Özgür Özyılkan, MD

#### **6. LENGTH AND PERIOD**

This course requires 1 hour within a committee lasting 5 weeks. Topics to be covered are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	Breast cancer

#### **7. TEACHING AND LEARNING METHODS**

This course includes lectures, and class discussions.

#### **8. ASSESSMENT**

The students are responsible from all the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures

At the end of each committee each student will take multi-choice exam.

#### **9. LANGUAGE**

Turkish.

## PHASE III

### COMMITTEE 6 “ENDOCRINOLOGY, OBSTETRICS AND GYNECOLOGY”

#### 1. IDENTIFICATION

##### PEDIATRIC SURGERY

#### 2. DESCRIPTION

Included in the ‘Endocrinology, Obstetrics and Gynecology’ Subject Committee; fetal surgery lecture is focused on in-utero-diagnosed congenital anomalies which (may) require in-utero surgical intervention(s), and is composed of the diagnostic tools, clinical management and treatment of such cases.

#### 3. LEVEL

a. **Prerequisite:** None. This lecture is for only phase III students of medical faculty and is included in the ‘Endocrinology, Obstetrics and Gynecology’ subject committee. All students are required to have successfully completed phase II; during which, endocrine, embryology, anatomy and physiology are taught.

b. **Objectives:** To explain the methods of diagnosis of progressive and/or treatable intra-uterine pathologic conditions and the interventions applied to appropriate cases to reduce postnatal mortality and morbidity; indications and advantages of fetal surgery; fetal surgical interventions performed in Turkey.

c. **Learning Outcomes:** At the end of this course, the students are expected to know the following:

1. The methods of diagnosis of progressive and/or treatable intra-uterine pathologic conditions and the interventions applied to appropriate cases to reduce postnatal mortality and morbidity
2. Indications and advantages of fetal surgery
3. Fetal surgical interventions performed in Turkey

#### d. References:

1. Bebek ve Çocukların; Cerrahi ve Ürolojik Hastalıkları, 2006, Palme Yayıncılık
2. Pediatric Surgery, 6. Edition, 2006, Mosby
3. Jones’ Clinical Paediatric Surgery: Diagnosis and Management, Sixth Edition, 2008, Blackwell Publishing
4. Katkı Pediatri Dergisi, Çocuk Cerrahisi I-II, 2004, Cilt: 26, Sayı: 4-5
5. Published lecture notes

#### **4. MANDATORY OR OPTIONAL COURSE**

It is a mandatory course.

#### **5. TEACHING STAFF**

brahim Ötgün, MD, Assist Prof.

#### **6. LENGTH AND PERIOD**

This course requires 1 hour within a committee lasting 5 weeks. The subjects included are as follows:

<b>HOUR</b>	<b>SUBJECT</b>
<b>1</b>	nterauterine diagnosis and surgery

#### **7. TEACHING AND LEARNING METHODS**

The course is composed of a theoretical lecture of 50 minutes.

#### **8. ASSESSMENT**

Written examination at the end of the committee (multiple choice questions).

#### **9. LANGUAGE**

Turkish.

## **I. Identification of the course:**

### **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

#### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

#### **3. Level: 345**

##### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

##### **c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

#### **4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

**5. Teaching Staff**  
Selda Erdem Çekiç

**6. Length and Period**

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b>	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b>	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b>	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b>	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b>	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b>	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b>	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b>	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b>	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.

### **7. Teaching and Learning Methods**

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

### **8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

<b>Name</b>	7 <sup>th</sup> Committee: NEPHROLOGY AND URINARY SYSTEM
<b>Status</b>	Compulsory
<b>ECTS credits</b>	3,9
<b>Responsibility</b>	Prof. Dr. Y. Cem AYGÜN
<b>Prerequisite</b>	None
<b>Period</b>	3 weeks, 61 hours
<b>Content</b>	This course include lectures on physiopathology of renal diseases, diagnostic and therapeutic methods, fluid electrolyte and asid-base disorders, drugs used in the treatment of urinary system disease and drug nephrotoxicity
<b>Objectives</b>	<p>The objectives of this course is to familiarize students with the basic concepts of renal paranchymal diseases, fluid electrolyte and acid-base disorders and to help them to develop an ability to diagnose and manage various symptoms and complications of renal diseases.</p> <p>To familiarize the students with the anatomy and embryology of genitourinary tract, malignancies and infectious diseases of genitourinary tract and treatment of urological disorders.</p> <p>To familiarize the students with the drugs affecting diuresis, fluid-electrolyte and acid-base balance, and the nephrotoxic effects of drugs. It also aims to teach and discuss the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse effects of the diuretic drugs, drugs used in fluid-electrolyte and acid-base imbalance and the mechanisms of and examples for drug-induced nephrotoxicity.</p>
<b>Learning Outcomes</b>	<p>At the end of this course, the student is expected to be able to understand general pathogenesis and morphology of renal diseases fluid electrolyte and acid-base disorders .</p> <p>The students should explain the properties, diagnosis and treatment of urological diseases.</p> <p>The students should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse and toxic effects of the diuretic drugs, drugs used in fluid-electrolyte and acid-base imbalance. In addition, the student is expected to discuss the mechanisms of drug-induced nephrotoxicity and to give examples for nephrotoxic drugs.</p>
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. Smith's General Urology (Tanagho EA, McAninch JW, ed). Sixteenth edition. New York, Lange Medical Books/McGraw Hill, 2004, New York, A.B.D.</li> <li>2. Comprehensive Clinical Nephrology, Richard Jhonson, Third edition, MOSBY</li> <li>3. Brenner and Rector's The Kidney edition:2007, Saunders</li> <li>4. Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999</li> </ol>
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical (%95), 9 Medical English (%5)
<b>Language</b>	Turkish

## PEDIATRIC NEPHROLOGY

### 1. IDENTIFICATION OF THE COURSE

**PEDIATRIC NEPHROLOGY (NEPHROLOGY AND URINARY SYSTEM ,  
COMITTEE 7)**

### 2. DESCRIPTION

This course involves the theoretical paediatric nephrology lectures reviewing the pathophysiology, etiology, clinical signs and symptoms of pediatric urinary system and renal diseases as well as diagnostic tools and therapeutic approach.

### 3. LEVEL

- a. Prerequisite:** None except for being successfully promoted from Phase II.
- b. Objectives:** The objective of the course is to familiarize the students with the pathogenesis, etiology, clinical signs and symptoms, differential diagnosis, clinical signs and symptoms and treatment of urinary system and kidney diseases in children. Students are guided to get the ability to approach systematically to a child with a suspected urinary and/or renal disease and make an appropriate diagnosis and treatment plan by using evidence based scientific data.
- c. Learning outcomes:** At the end of the PEDIATRIC NEPHROLOGY course, students are expected to know the pathophysiology, etiology, clinical signs and symptoms, treatment options and prognosis of congenital and acquired renal diseases, glomerulonephritis, nephritic syndrome, hypertension, tubulopathies, and urinary tract infections, acute and chronic renal failure. The presenting signs and symptoms of renal disease and problems of urinary system. They will also be able to plan appropriately the etiologic and diagnostic investigation of a child with a suspected renal or urinary system disease. Students will be able to understand and discuss electrolyte and acid base metabolism.
- d. References:**

1. Avner ED, Harmon WE, Niaudet P. 2004. Pediatric Nephrology, 5th Ed, LippincottWilliams&Wilkins, USA

2. Kher KK, Schnaper HW, Makker SP. 2007. Clinical Pediatric Nephrology, 2nd Ed. Informa, UK.
3. Kiessling SG, Goebel J, Somers MJG. 2009, Pediatric Nephrology in the ICU. Springer-Verlag Berlin Heidelberg, Germany
4. Assadi F. 2008. Clinical Decisions in Pediatric Nephrology. Springer Science+Business Media, USA

**4. THE STATUS OF THE COURSE:** This course is a mandatory course

**5. TEACHING STAFF OF THE COURSE**

Esra Baskın (Prof. of Pediatric Nephrology)

Umut Selda Bayrakçı (Assoc. Prof. of Pediatric Nephrology)

**6. THE PERIOD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lecture 1	Hereditary kidney diseases
Lecture 2	Tubulopathies
Lecture 3	Nephrotic syndrome
Lecture 4	Proteinuria
Lecture 5	Nephritic Syndrome
Lectures 6	Hereditary glomerular diseases
Lecture 7	Urinary system infections in childhood
Lecture 8	Acute renal failure

**7. TEACHING AND LEARNING METHODS**

PEDIATRIC NEPHROLOGY course will consist of lectures, class discussions

**8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of TIP 357- PEDIATRIC

NEPHROLOGY questions in the committee exam due to the proportion of the course within the committee.

**8. LANGUAGE:** The language of the course is Turkish.

## **GENERAL SURGERY**

### **1. DESCRIPTION**

This course reviews basic subjects in general surgery. After a brief overview of the course, the course deals with renal transplantation.

### **2. LEVEL**

- a. **Prerequisites:** None.
- b. **Objective:** The first objective of the course is to familiarize students with renal transplantation.
- c. **Learning outcomes:** Basic principles of renal transplantation should be learned.
- d. **References:**

### **Textbooks**

1. Schwartz SI, Shires TG, Spencer FC, Daly JM, Fischer JE, Galloway AC. Principles of Surgery. 1999, McGraw-Hill, USA.
2. Townsend CM, Harris JW. Sabiston Textbook of Surgery. 2001, 17th ed. WB Saunders Comp, USA.
3. Wilmore DW, Cheung LY, Harken AH, Holcroft JW, Meakins JL, Soper NJ. American College of Surgeons ACS Surgery Principles and Practice. 2002, WebMD Corp., USA.

### **3. MANDATORY OR OPTIONAL COURSES**

This course is a mandatory course.

### **4. TEACHING STAFF**

Gökhan Moray, M.D. Prof.

### **5. LENGTH AND PERIOD**

This course is an eight weeks course, which consists of 12 hours. Topics to be covered are as follows:

<b>Hour</b>	<b>Subject</b>
1	Renal Transplantation

### **6. TEACHING AND LEARNING METHODS**

The course will consist of lectures and class discussions.

### **7. ASSESSMENT**

Students will be responsible from all lectures. Class participation is a vital component of this course. Students are expected to attend classes regularly. At least 90 % attendance is required. Students are expected to read the assigned material in advance to be ready to participate to class discussions.

There will be a final exam. The final exam will cover all topics.

**8. LANGUAGE:** The language of the course is Turkish.

## **PHARMACOLOGY**

### **1. IDENTIFICATION OF THE COURSE**

#### **PHARMACOLOGY: NEPHROLOGY AND URINARY SYSTEM (COMMITTEE 7)**

### **2. DESCRIPTION**

This course reviews the therapeutic approach to urinary system diseases. It consists of theoretical pharmacology lectures focusing on the pharmacokinetic and pharmacodynamic properties, action mechanisms, adverse and toxic effects of the drugs used in the treatment of urinary system diseases. Additionally, this course focuses on the drugs affecting diuresis pharmacology, fluid-electrolyte and acid-base balance, and nephrotoxic drugs.

### **3. LEVEL**

**e. Prerequisite:** None except for being successfully promoted from Phase II.

**f. Objectives:** The course aims to familiarize the students with the drugs affecting diuresis, fluid-electrolyte and acid-base balance, and the nephrotoxic effects of drugs. It also aims to teach and discuss the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse effects of the diuretic drugs, drugs used in fluid-electrolyte and acid-base imbalance and the mechanisms of and examples for drug-induced nephrotoxicity.

**g. Learning outcomes:** At the end of the PHARMACOLOGY course, the students should explain the pharmacokinetics, pharmacodynamics features, action mechanisms and the adverse and toxic effects of the diuretic drugs, drugs used in fluid-electrolyte and acid-base imbalance. In addition, the student is expected to discuss the mechanisms of drug-induced nephrotoxicity and to give examples for nephrotoxic drugs.

#### **h. References**

1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.
2. Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.

3. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.
4. Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.
5. Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.
6. Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.
7. Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

**4. THE STATUS OF THE COURSE:** This course is a mandatory course

**5. TEACHING STAFF OF THE COURSE**

Müge Tecder-Ünal, MD, PhD (Assoc. Professor of Pharmacology)

Tolga Re at Aydos, MD, PhD (Assistant Professor of Pharmacology)

**6. THE PERIOD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lectures 1- 2	Drugs affecting acid-base balance
Lecture 3	Pharmacology of diuresis and diuretics
Lecture 4	Nephrotoxic effects of drugs

**7. TEACHING AND LEARNING METHODS**

PHARMACOLOGY course will consist of lectures, class discussions

**8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

**8. LANGUAGE:** The language of the course is Turkish.

## **PATHOLOGY**

### **1. DESCRIPTION**

This course reviews the malformations of kidney, cystic renal diseases, glomerular diseases, renal vascular diseases, tubulointerstitial diseases, the neoplasms of the urinary tract and kidney, testis and prostate diseases. After a brief overview of the course, the course deals with pathologic basis of all systems as well as immunologic and molecular and pathophysiological 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 pathology and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiological mechanisms.

**c. References:**

#### Textbooks

1) Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999

2) Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996

3) Anderson's Pathology; Eds. Damjanov I., Linder J; Tenth Edition, Mosby, 1996

4) Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

B. Handan Özdemir Prof.

Nihan Haberal Reyhan, Assoc. Prof

Nebil Bal Assoc. Prof

ebnem Ayva MD

### **5. LENGTH AND PERIOD**

This committee includes 9 hours of pathology classes. Topics to be covered are as follows:

- Congenital malformations and cystic diseases of the kidney
- Tubulointerstitial diseases
- Vascular diseases of the kidney

- Glomerular diseases
- Neoplasms of the kidney and urinary tract
- Testis and prostate diseases
- Laboratory practices

**6. TEACHING AND LEARNING METHODS OF THE COURSE**

Third committee includes lectures, class discussions and laboratory practices

**7. ASSESSMENT METHODS OF THE COURSE**

**8. THE LANGUAGE OF INSTRUCT ON**

Turkish.

**9. LEARNING OUTCOMES:**

At the end of the module the student is expected to be able to:

- explain the more common reasons for difficult behavior in primary school children in class situations, indicating standard techniques for ameliorating that behavior.

## **NEPHROLOGY**

### **1. DESCRIPTION**

This course deals with the definition of renal parenchymal diseases, fluid electrolyte and acid-base disorders as well as pathophysiology, differential diagnosis and the principle of basic therapy of these diseases.

### **2. LEVEL**

**a. Prerequisite:** None

**b. Objectives:** The objective of this course is to familiarize students with the basic concepts of renal parenchymal diseases, fluid electrolyte and acid-base disorders and to help them to develop an ability to diagnose and manage various symptoms and complications of renal diseases.

**c. Learning of outcomes:** At the end of this course, the student is expected to be able to understand general pathogenesis and morphology of renal diseases fluid electrolyte and acid-base disorders .

**d. References:**

- 1- Comprehensive Clinical Nephrology, Richard Jhonson, Third edition, MOSBY
- 2- Brenner and Rector's The Kidney edition:2007, Saunders

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

Prof. Dr. Siren Sezer

Doç. Dr. Turan Çolak

Doç. Dr. Emre Tural

Doç. Dr. Dilek Torun

Doç Dr. Gültekin Gençtoy

Doç. Dr. Ay egül Zümrütdal

Do. Dr. Hasan Miçözkadıo lu

### **5. LENGTH AND PERIOD**

This course includes 13 hours of lectures. Topics to be covered are as follows:

**Committee 3: Nephrology and urinary system**

Lecture 1	Renal function tests in clinical practice Renal pathophysiology
Lecture 2	Distribution of fluid and electrolytes in the body
Lecture 3	Disorders of sodium metabolism and edema
Lecture 4	Disorders of potassium metabolism
Lecture 5	Acid-base metabolism
Lecture 6	Renovascular diseases
Lecture 7-8	Chronic renal failure
Lecture 9	Disorders of calcium, phosphorus and magnesium metabolism
Lecture 10-11	Glomerulonephritis
Lecture 12	Renal pathophysiology
Lecture 13	Tubulointerstitial nephritis

## **6. TEACHING AND LEARNING METHODS OF THE COURSE**

This course includes lectures, class discussions and laboratory practises

## **7. ASSESSMENT METHODS OF THE COURSE**

The students are responsible from all the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures. At the end of each committee each student will take multi-choice exam.

## **8. THE LANGUAGE OF INSTRUCTION**

Turkish.

## **RADIOLOGY**

### **1.IDENTIFICATION OF THE COURSE (6<sup>th</sup> COMMITTEE)**

Radiology, uro-radiology. Topics of the courses are “Radiology of the urinary tract”, “Radiology of the male genitourinary system”. These lectures are within the program of “Nephrology and urinary system” committee.

### **2.COURSE DESCRIPTION**

These courses consist of normal and pathological radiological appearances and related knowledge of the urinary tract disorders for both medical and surgical conditions and also for pediatric and adult groups.

### **3.LEVEL AND PREREQUISITES OF THE COURSES:**

This course is only for third year medical students. All students are expected to be completed successfully of the related classes, such as anatomy, physiology and clinical, which were given during second year.

### **4.OBJECTIVES AND LEARNING OUTCOMES OF THE COURSES**

At the end of the courses it is expected below mentioned benefits will be gained by the students.

The normal and pathological radiographic, ultrasonographic, NM., CT. and MR. appearances of the urinary tract, radiological findings and differential diagnostic criteria of the medical and surgical disease conditions of the genitourinary system, indications and limitations of the radiological modalities, will be taught.

Including to these in the pediatric and adult groups of patients, radiological abnormalities of the congenital, traumatic, infections inflammatory, vascular, tumorous etc. diseases of the kidneys, ureters, bladder, prostate and urethra will be made familiarized as much as possible. In addition to the diagnostic informations, brief interventional radiological knowledge related to the urinary tract will be given.

### **5. REFERENCES OF THE COURSE**

Text book of radiology and imaging. David SUTTON Churchill-Livingstone 2007  
(Genitourinary tract, 885-1106)

### **6.FEATURES OF THE COURSE**

This course consist of 2. 50 minutes lectures without laboratory applications.

### **7.THE LANGUAGE OF INSTRUCTIONS**

Turkish

## NUCLEAR MEDICINE

### 1.IDENTIFICATION OF THE COURSE

Nuclear Nephrourology

### 2. COURSE DESCRIPTION

The objective of the course is to familiarize students with dynamic and static renal scintigraphy, radionuclide cystourography; scintigraphic methods used in the evaluation of renal transplants, obstructive uropathy and renovascular hypertension.

### 3. LEVEL OF THE COURSE

e. **Prerequisite:** None

f. **Objectives:** The aim of this course is to teach students scintigraphic procedure used in the evaluation of nephrourologic diseases; radionuclides and renogram patterns

g. **References:**

#### Textbooks:

1) Görpe A., Cantez S. (1992). Pratik Nükleer Tıp, İstanbul Tıp Fakültesi Vakfı

2) Essential of Nuclear medicine Imaging, Ed. Mettler FA, Guiberteau MJ, 3rd Edition, Saunders Company, 1991

3)Wilson AW. (1998). Textbook of Nuclear Medicine, Lippincott-Raven

### 4.THE STATUS OF THE COURSE:

This course is a mandatory course.

### 5.TEACHING STAFF

Prof.Dr.Ay e Akta

### 6.LENGTH AND PERIOD

This committee includes 1 hours of Nuclear Medicine Lecture. Topics to be covered are as follows:

SUBJECTS	
1- Nuclear Medicine	Nuclear Nephrourology; Dr.Ay e Akta

### 7. TEACHING AND LEARNING METHODS OF THE COURSE

Third committee includes lectures and class discussions

**8. ASSESSMENT METHODS AND GRADING OF THE COURSE:**

At the end of the module the student is expected to be able to:

- define radionuclides used in renal scintigraphic procedures, indications and specific renogram patterns used in the evaluation of nephrourologic diseases.

**9. THE LANGUAGE OF INSTRUCTION:**

Turkish.

**10. ECTS CREDIT ALLOCATION:**

## **INFECTIOUS DISEASES**

### **1. IDENTIFICATION OF THE COURSE**

#### **INFECTIOUS DISEASES**

### **2. COURSE DESCRIPTION**

Two lessons entitled “Urinary tract infections” and “Sexually transmitted diseases” are presented in the Nephrology and Urinary System Committee for the third year medical students.

### **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for the third year medical students and given during the Nephrology and Urinary System Committee. All the students are expected to complete the second year in the medical faculty successfully.

### **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

**At the end of the “urinary tract infection” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis including urinary tract infection according to clinical symptoms and signs,
2. To determine the tests (urinalysis, urine culture, complete blood count, other laboratory or imaging tests when needed) required to diagnose urinary tract infection definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with urinary tract infection.

**At the end of the “sexually transmitted diseases” lesson, students are expected to be able to:**

1. Set up a list of differential diagnosis of sexually transmitted diseases according to clinical symptoms and signs,
2. To determine the tests (gram staining and culture of the genital ulcer, complete blood count, other laboratory or imaging tests when needed) required to diagnose which sexually transmitted disease definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

## **5. REFERENCES OF THE COURSE**

1. Principles and Practice of Infectious Diseases  
Gerald L.Mandell, John E. Bennett, Raphael Dolin
2. Infectious Diseases  
Jonathan Cohen, William G. Powderly
3. enfeksiyon Hastalıkları  
Ay e Willke Topçu, Güner Söyletir, Mehmet Do anay

## **6. FEATURES OF THE COURSE**

This course consists of five lectures entitled “Enteric fever”, “Parasitic Diseases”, “Acute viral hepatitis”, “Food poisoning”, “Gastroenteritis” with no laboratory applications. The duration of each lecture is 50 minutes.

## **TEACHING STAFF**

Doç. Dr. Ziya DEM RO LU

## **8. THE LANGUAGE OF INSTRUCTION**

Turkish

## UROLOGY

### 1. IDENTIFICATION OF THE COURSE

#### UROLOGY: NEPHROLOGY AND URINARY SYSTEM (COMMITTEE 6)

### 2. DESCRIPTION

This course reviews diagnostic methods and therapeutic approach to urinary system diseases. It consists of lectures focusing urogenital anatomy and embryology, symptoms, physical examination, laboratory methods, stone disease, urological cancer, obstruction, trauma, lower urinary tract dysfunction, male infertility, sexual dysfunction.

### 3. LEVEL

1. **Prerequisite:** None except for being successfully promoted from Phase II.
2. **Objectives:** The course aims to familiarize the students with the anatomy and embryology of genitourinary tract, symptoms, physical examination and laboratory tests in genitourinary diseases and treatment of urological disorders.
3. **Learning outcomes:** At the end of the MED-392 UROLOGY course, the students should explain the properties, diagnosis and treatment of urological diseases.
4. **References**

Smith's General Urology (Tanagho EA, McAninch JW, ed). Sixteenth edition. New York, Lange Medical Books/McGraw Hill, 2004

### 4. THE STATUS OF THE COURSE: This course is a mandatory course

### 5. TEACHING STAFF OF THE COURSE

Hakan Özkarde M.D. (Professor of Urology)

Ç. Levent Pe kircio lu (Professor of Urology)

Dr. M. İteri Tekin (Professor of Urology)

Dr. Y. Cem Aygün (Assoc. Professor of Urology)

Dr. Yavuz Akman (Assoc. Professor of Urology)

Dr. Ayhan Dirim (Assoc. Professor of Urology)

Dr. Ahmet brahim O uzülgen (Assistant Professor of Urology)

Dr. Ümit Gül

Dr. Alparslan Yüksel

## 6. THE PERIOD AND THE PLAN OF THE COURSE

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lecture 1	Anatomy of urinary tract
Lecture 2	Embryology of genitourinary tract
Lecture 3	Specific urinary system infections
Lecture 4	Male infertility
Lecture 5	Basic principles and molecular biology of urooncology
Lecture 6	Lower urinary tract dysfunction and incontinence
Lectures 7	Obstruction of urinary tract and its clinical significance
Lecture 8	Stone disease

## 7. TEACHING AND LEARNING METHODS

TIP 392-UROLOGY course will consist of lectures, class discussions

## 8. ASSESSMENT METHODS AND GRADING OF THE COURSE

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED 392-UROLOGY questions in the committee exam due to the proportion of the course within the committee.

## 9. LANGUAGE:

The language of the course is Turkish.

## **I. Identification of the course:**

### **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

#### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

#### **3. Level: 345**

##### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

##### **c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

#### **4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

## 5. Teaching Staff

Selda Erdem Çekiç

## 6. Length and Period

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b> 08.09.-17-10 (12 hours)	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b> 20.10-01.12 (9 hours)	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b> 02.12. 26.12 (9 hours)	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b> 29-12-16.01 (9 hours)	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b> 02.02-04.03 12 hours	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b> 05.03-25.03 (6 hours)	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b> (9 hours) 26.03-21 April (9 hours)	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b> 22.04-12.05 (9 hours)	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b> 14.05-12-06 (9 hours)	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.

### **7. Teaching and Learning Methods**

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

### **8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

<b>Name</b>	8 <sup>th</sup> Committee: NEUROLOGY AND PSYCHIATRY
<b>Status</b>	Compulsory
<b>ECTS credits</b>	5,9
<b>Responsibility</b>	Prof.Dr. Ufuk CAN
<b>Prerequisite</b>	None
<b>Period</b>	5 weeks, 87 hours
<b>Content</b>	Central and peripheral nervous system diseases, basis psychiatric terminology, eye disorders, inner ear and vestibular diseases, neurosurgery, congenital nervous system diseases
<b>Objectives</b>	<p>To familiarize the students with the central nervous system semiology and to teach and increase their ability to solve clinical problems by using their knowledge of clinical neuroanatomy, neurophysiology and semiology.</p> <p>To familiarize students with the basic concepts within psychiatry and to help them to develop an understanding of the major psychiatric disorders using epidemiology, etiology and clinical properties as a frame.</p> <p>To familiarize students with the basic concepts and nomenclature in the pathology of central nervous system, peripheral nerve and eye diseases and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms.</p> <p>To familiarize the students with the central nervous system pharmacology and to teach and discuss the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse effects of the drugs used in neurological and psychiatric diseases, and the anaesthetic agents, analgesic and antipyretic drugs.</p>
<b>Learning Outcomes</b>	<p>The students should recognize the symptoms of neurological disorders and can locate the lesion neuroanatomically according to the symptoms and neurological findings of the patient.</p> <p>The students are expected to be able to demonstrate detailed understanding of the epidemiology, etiology, and clinical properties of mental disorders.</p> <p>The student is expected to be able to understand general pathogenesis and morphology of central nervous system, peripheral nerve and eye diseases.</p> <p>The students should explain the pharmacokinetic, pharmacodynamic properties, action mechanisms and the adverse and toxic effects of the drugs used in the medical (pharmacological) treatment of the central nervous system diseases, pain and fever, and in anaesthesia.</p>
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. 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 2000</li> <li>2. Adams and Victor's Principles of Neurology: A.H. Ropper, R.H. Brown Editors: USA McGraw_Hill 2005</li> <li>3. Merritt's Neurology: Rowland L.P. editor:Philadelphia Lippincott Williams and Wilkinson 2000</li> <li>4. Öztürk MO, Ulu ahin A (2008) Ruh Sa lı ı ve Bozuklukları, Ankara, Tuna Matbaacılık.</li> <li>5. Sadock BJ, Sadock VA (2007) Kaplan and Sadock's Synopsis of Psychiatry Behavioral Sciences/Clinical Psychiatry, Tenth Edition, Philadelphia:</li> </ol>

	Lippincott Williams & Wilkins.
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical (%95), Medical English (%5)
<b>Language</b>	Turkish

## 1. IDENTIFICATION OF THE COURSE

**PEDIATRIC NEUROLOGY** (As a part of Nervous System Diseases and Psychiatry, Committee 8)

## 2. DESCRIPTION

This course involves the theoretical pediatric neurology lectures reviewing the pathophysiology, etiology, clinical signs and symptoms of neurologic diseases and disorders of childhood as well as diagnostic tools and therapeutic approach.

## 3. LEVEL

- a. **Prerequisite:** None except for being successfully promoted from Phase II.
- b. **Objectives:** The objective of the course is to familiarize the students with the pathogenesis, etiology, clinical signs and symptoms, differential diagnosis, clinical signs and symptoms and treatment of diseases of central and peripheral nervous system in children. Students are guided to get the ability to approach systematically to a child with a suspected neurologic disease and make an appropriate diagnosis and treatment plan by using evidence based scientific data.
- c. **Learning outcomes:** At the end of the PEDIATRIC NEUROLOGY course, students are expected to know the pathophysiology, etiology, clinical signs and symptoms, treatment options and prognosis of childhood neurologic diseases including seizure disorders, neurodegenerative diseases, muscular dystrophies and hypotonic infant. They will also be able to plan and conduct the diagnostic investigation of a child with a suspected neurologic disease appropriately.
- d. **References:**
  1. Clinical Pediatric Neurology. Ed: Fenichel GM, 5th Ed, 2005, Elsevier Saunders, Philadelphia, USA
  2. Child Neurology. Eds: Menkes JM, Sarnat HB, Maria BL. 7th ED, 2006, Philadelphia, USA.
  3. Çocuk Nörolojisi. Türkiye Çocuk Nörolojisi Derneği, 2006, Ankara.

4. **THE STATUS OF THE COURSE:** This course is a mandatory course

## 5. TEACHING STAFF OF THE COURSE

Dr. Taner Sezer

## **6. THE PERIOD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 4 weeks. Topics to be covered are as follows:

Lecture 1	Childhood epileptic syndromes
Lecture 2	Hypotonic infant
Lecture 3	Muscular dystrophies
Lecture 4	Neurodegenerative diseases

## **7. TEACHING AND LEARNING METHODS**

PEDIATRIC NEUROLOGY course will consist of lectures, and class discussions of at the end of the lecture

## **8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED 358- PEDIATRIC NEUROLOGY questions in the committee exam due to the proportion of the course within the committee.

**8. LANGUAGE:** The language of the course is Turkish.

## **1. IDENTIFICATION OF THE COURSE:**

### **NEUROSURGERY**

Included in Nervous System Disease and Psychiatry (Committee 8)

## **2. DESCRIPTION**

The course deals with congenital diseases of the central nervous system, neurosurgical trauma, surgical cerebrovascular diseases, cranial and spinal neoplasms and peripheral nerve trauma and entrapment syndromes. The lessons will cover not only the current concepts in neurosurgery but also the experiences of the teaching staff.

## **3. LEVEL**

- a. Prerequisites:** Successful finishing of Phase II
- b. Objectives:** The first objective of the course is to familiarize students with the basic concepts and nomenclature in neurosurgery. The second objective is to convey the basic diagnostic and treatment principles of the diseases in the field of neurosurgery.
- c. Learning outcomes:** At the end of the course the students should be familiar with neurosurgical nomenclature and also with diagnosis and treatment of the common diseases the management of which is done by neurosurgeons
- d. References:**

## **3. TEXT BOOKS**

- 1) Mark S. Greenberg. Handbook of Neurosurgery. fifth Edition, Thieme, 2001
- 2) Principles of Neurosurgery , Rengachary. SS, Ellenbogen RG (eds) Second edition, Elsevier Mosby,Edinburgh, 2005
- 3) Atlas of Neurosurgical Techniques, Spine and Peripheral Nerves, Fessler RG, Sekhar L (eds), Thieme Medical Publishers Inc., NewYork, 2006
- 4) Vaccaro AR. Principles and Practice of Spine Surgery. Mosby, 2003
- 5) Youmans. Neurological Surgery, Winn HR (ed) Fifth edition. W.B. Saunders, Pennsylvania 2004
- 6) Temel Nöro irürji,Türk Nöro irürji Derne i Yayınları, Cilt I ve II, Ankara, 2005

## **4. THE STATUS of the COURSE**

This course is mandatory

## **5. TEACHING STAFF of the COURSE**

Nur Altınörs, MD Professor of Neurosurgery and Chairman

Salih Gülen, MD, Assoc Prof

Cem Yılmaz, MD, Assoc Prof

## **6. LENGTH AND PERIOD**

This course is a four weeks course which consists of 10 hours. Topics to be covered are as follows:

Congenital diseases of the central nervous system
Craniocerebral trauma
Intracranial surgical vascular diseases
Cranial and spinal tumors
Intervertebral disc disease
Spinal trauma
Peripheral nerve trauma and entrapment syndromes

## **7. TEACHING AND LEARNING METHODS**

The course will consist of lectures and class discussions.

## **8. ASSESSMENT METHODS and GRADING of the COURSE**

There will be a final examination for Committee 8. The “multiple choice-one correct answer” type questions will be asked related to subjects covered by MED 385. The number of questions of the NEUROSURGERY will be decided by Phase III Coordination Office and this number will be associated with the ratio of the number of lectures of MED 385 to total number of lectures of Committee 8.

## **9. LANGUAGE:** Turkish.

## 1.IDENTIFICATION OF THE COURSE :

### NEUROLOGY

As a part of Nervous System Diseases And Psychiatry (Commitee 8)

**2.DESCRPTION:** This course involves the theoretical approach to basic neurology, neurological disorders, clinical approach and treatment.

#### **3.LEVEL:**

**a.Prerequisite:** None except for being successfully promoted from Phase II.

**b. Objectives:** The first objective of the course is to familiarize the students with the central nervous system semiology. The second objective is to teach and increase their ability to solve clinical problems by using their knowledge of clinical neuroanatomy, neurophysiology and semiology.

**c. Learning outcomes:** At the end of the NEUROLOGY course, the students should recognize the symptoms of neurological disorders and can locate the lesion neuroanatomically according to the symptoms and neurological findings of the patient.

#### **d. References:**

1. Resimli Açıklamaları ile Nöroloji ve Nöro irürji: Türkçe le tiren ve yayına hazırlayan: Doç. Dr. Mustafa Bozbu a, 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 2000
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 2000

**4.THE STATUS OF THE COURSE:** This course is a mandatory course

#### **5.TEACHING STAFF OF THE COURSE**

Sibel Benli MD, Professor of Neurology

Ufuk Can MD, Professor of Neurology

Münire Kılınç Toprak MD, Assoc. Professor of Neurology

Seda Kibarolu, MD

#### **6.THE PERIOD AND THE PLAN OF THE COURSE**

This course is consists of 12 lessons in a committee which consists of 88 lessons over 5 weeks. Topics to be covered are as follows:

Lesson 1	Neurological examination
Lesson 2	Approach to a neurologic patient
Lesson 3	Management of headache
Lesson 4	Posture and movement disorders
Lesson 5	Cerebellar disorders
Lesson 6-7	Cerebral lobes and functions I-II

Lesson 8	Management of a patients with transient loss of consciousness
Lesson 9	Motor paralysis and diagnostic methods
Lesson 10	Sensation disorders and diagnostic methods
Lesson 11-12	Case discussion

## **7.TEACHING AND LEARNING METHODS**

MED 384 NEUROLOGY course will consist of lectures, class discussions

## **8.ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED 384 NEUROLOGY questions in the committee exam due to the proportion of the course within the committee.

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

## ANESTHESIOLOGY

### 1. DESCRIPTION

This is a multidisciplinary course consists of *Pediatrics, Neurology, Neurosurgery, Pharmacology, Pathology, Radiology, Ophthalmology, Anesthesiology, ENT, Microbiology and Infectious Diseases, Psychiatry* lectures.

Course topics deal with *Anesthesiology*;

History, and scope of anesthesia are discussed in the course. Preoperative evaluation of patients, premedication, and practice of anesthesia are discussed. Pain pathways and pain management are also discussed.

### 2. LEVEL

- a. **Prerequisites:** None.
- b. **Objectives:** Objective of the course is to review and familiarize students with anesthesiology practice. The main goal of this course is to teach students history of anesthesia, preoperative anesthetic evaluation and planning, pain pathways and pain management.
- c. **Learning outcomes:** The students should be able to evaluate patients in anesthesiology
- d. **References:**

#### Textbooks

Morgan GE, Mikhail MS, Murray MJ. (2002) Clinical Anesthesiology, McGraw Hill, USA

Zeynep Kayhan. (1997) Klinik Anestezi, Logos Yayıncılık, İstanbul

Marino PL. (1998) The ICU book, Williams and Wilkins, Baltimore

Barash PG, Cullen BF, Stoelting RK. (1991) Clinical Anesthesia, JB Lippincott Company, Philadelphia

DiNardo JA. (1998) Anesthesia for Cardiac Surgery, Appleton Lange, Connecticut

Miller RD. (2000) Anesthesia, Churchill Livingstone, New York

Ayres SM, Grenvik A, Holbrook PR, Shoemaker WC. (1995) Textbook of Critical Care, WB Saunders, Philadelphia

### 3. MANDATORY OR OPTIONAL COURSE

This course is a mandatory course

### 4. TEACHING STAFF

Doç.Dr. Pınar Zeynelo lu

Y.Doç.Dr. Co kun Araz

### 5. LENGTH AND PERIOD

The five week course period includes the following lectures

- a) Physiology and control of pain I and II
- b) Methods of general anesthesia and premedication I and II

## **6. ASSESSMENT**

Students will be responsible from all textbooks. Students are encouraged to make extra readings. Class participation is a vital component of this course. Students are expected to attend classes regularly. At least 80 % attendance is required. Students are expected to read the assigned material in advance to be ready to participate to class discussions. There will be exam that covers all topics at the end of the course.

**7. LANGUAGE:** The language of the course is Turkish.

## 1. IDENTIFICATION OF THE COURSE

### **PHARMACOLOGY: NERVOUS SYSTEM DISEASES AND PSYCHIATRY** **(COMMITTEE 8)**

## 2. DESCRIPTION

This course involves the theoretical pharmacology lectures reviewing the therapeutic approach to neurological and psychiatric diseases, which also reviews the pharmacokinetic and pharmacodynamic properties, action mechanisms, adverse and toxic effects of the drugs used in the treatment of neurological and psychiatric diseases, pain and fever, and of the agents used for anaesthesia.

## 3. LEVEL

- a. **Prerequisite:** None except for being successfully promoted from Phase II.
- b. **Objectives:** The first objective of the course is to familiarize the students with the central nervous system pharmacology. The second objective is to teach and discuss the pharmacokinetic, pharmacodynamic properties, action mechanisms, adverse effects of the drugs used in neurological and psychiatric diseases, and the anaesthetic agents, analgesic and antipyretic drugs.
- c. **Learning outcomes:** At the end of the MED-342 PHARMACOLOGY course, the students should explain the pharmacokinetic, pharmacodynamic properties, action mechanisms and the adverse and toxic effects of the drugs used in the medical (pharmacological) treatment of the central nervous system diseases, pain and fever, and in anaesthesia.
- d. **References:**

1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.
2. Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.
3. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.
4. Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.

5. Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.
6. Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.
7. Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

4. **THE STATUS OF THE COURSE:** This course is a mandatory course

5. **TEACHING STAFF OF THE COURSE**

Meral Tuncer, MD, Prof of Pharmacology, Chairman

. Remzi Erdem, MD, PhD (Professor of Pharmacology)

Müge Tecder-Ünal, MD, PhD (Assoc. Professor of Pharmacology)

Tolga Re at Aydos, MD, PhD (Assistant Professor of Pharmacology)

6. **THE PER OD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 5 weeks. Topics to be covered are as follows:

Lectures 1-2	Introduction to central nervous system pharmacology
Lectures 3-4	General anaesthetics
Lecture 5	Analgesic and antipyretic drugs
Lecture 6	Opioid analgesics and their antagonists
Lecture 7	Neuroleptics
Lectures 8- 9	Drug abuse and substance addiction
Lecture 10	Central nervous system stimulants and hallucinogens
Lecture 11	Drugs used in Parkinson's disease
Lectures 12-13	Anticonvulsant and antiepileptic drugs
Lectures 14	Drugs used in depression
Lectures 15	Drugs used in mani

Lectures 16-17	Sedative and hypnotic drugs
Lecture 18	Local anaesthetics
Lecture 19	Neuromuscular blocking drugs

## **7. TEACHING AND LEARNING METHODS**

PHARMACOLOGY course will consist of lectures, class discussions

## **8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

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

## **PATHOLOGY**

### **1. DESCRIPTION**

This course deals with pathologic basis of central nervous system, peripheral nerve and eye diseases as well as immunologic 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 the pathology of central nervous system, peripheral nerve and eye diseases and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms.

**c. Learning of outcomes:** At the end of the course, the student is expected to be able to understand general pathogenesis and morphology of central nervous system, peripheral nerve and eye diseases.

**d. References:**

1. Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999
2. Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992
3. Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996
4. Anderson's Pathology; Eds. Damjanov I., Linder J; Tenth Edition, Mosby, 1996

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

Özlem Özen, M.D. Assoc.Prof.

A. Nihan Haberal Reyhan, MD. Assoc. Prof.

### **5. LENGTH AND PERIOD**

This course includes 9 hours of lectures. Topics to be covered are as follows:

## **Committee 7: Central nervous system, peripheral nerve and eye diseases**

Lecture 1	Cerebrovascular diseases of CNS
Lecture 2	Trauma, malformations and developmental diseases of CNS
Lecture 3	Diseases of eye
Lecture 4	Tumors of CNS
Lecture 5	Infections of CNS
Lecture 6	Degenerative diseases of CNS
Lecture 7	Demyelinating, toxic and metabolic diseases of CNS
Lecture 8	Diseases of peripheral nerve
Lecture 9	Laboratory session of central nervous system, peripheral nerve and eye diseases

### **6. TEACHING AND LEARNING METHODS OF THE COURSE**

This course includes lectures, class discussions and laboratory practises

### **7. ASSESSMENT METHODS OF THE COURSE**

The students are responsible from all the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures. At the end of each committee each student will take multi-choice exam.

### **8. THE LANGUAGE OF INSTRUCTION**

Turkish.

## 1. IDENTIFICATION OF THE COURSE

### MED CAL SCHOOL PHASE III- PSYCH ATRY

#### Course Description

This course deals with basic themes in psychiatry. Psychiatry is a discipline of observation and probing inquiry, and a clinical science of mental disorder and emotional responses to physiologic change, somatic illness, and life events. The primary purposes of psychiatry are to define and recognize illnesses, 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 understand brain anatomy, chemistry, and physiology to help them understand human emotion and behavior and to develop methods for treating abnormalities.

After reviewing the occurrences and definitions of various signs and symptoms in psychiatry and the classification of mental disorders, we will examine a number of theoretical issues. The epidemiology, etiology and clinical properties of major psychiatric disorders like delirium, dementia and other cognitive disorders, alcohol-related disorders and other substance-related disorders, schizophrenia and other psychotic disorders, mood disorders, anxiety disorders, somatoform and dissociative disorders will be the themes of the lectures.

## 2. Level of the Course

### a. Prerequisites of the Course:

none

### b. Objectives of the Course:

The objective of the course is to familiarize students with the basic concepts within psychiatry and to help them to develop an understanding of the major psychiatric disorders using epidemiology, etiology and clinical properties as a frame.

### c. Learning outcomes of the course:

The students are expected to be able to demonstrate detailed understanding of the epidemiology, etiology, and clinical properties of mental disorders.

### d. References of the Course:

Öztürk MO, Ulu ahin A (2008) Ruh Sa lı ı 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.

**3. The Status of the Course (Compulsory / Elective)**

Psychiatry phase III course is a compulsory course.

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

Prof. Dr. Af in Sa duyu

Prof. Dr. Nilgün Ta kıntuna

Prof. Dr. Mehmet Erkan Özcan

Doç. Gamze Özçürümez

Dr. Nurhak Ça atay Birer

Dr. Güler Alparslan Dal ar

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

This 12-hour course is the part of four-week committee of Nervous System Disorders and Psychiatry. Topics to be covered are as follows:

Lecture 1	Introduction to Psychiatry: Signs and Syntoms and Classification of Mental Disorders
Lecture 2-3	Delirium, Dementia and Other Cognitive Disorders
Lecture 4-5	Alcohol-Related Disorders and Other Substance-Related Disorders
Lecture 6-7	Schizophrenia and Other Psychotic Disorders
Lecture 8-9	Mood Disorders
Lecture 10-11	Anxiety Disorders
Lecture 12	Somatoform and Dissociative Disorders

**6. Teaching and Learning Methods of the Course**

This course includes lectures and class discussions

**7. Assessment Methods and Grading of the Course**

Each student will be evaluated according to the written examination of multiple choice questions which will be given at the end of the committee.

**8. The Language of Instruction**

Turkish.

**9. ECTS Credit Allocation**

## **1. IDENTIFICATION OF THE COURSE**

### **INFECTIOUS DISEASES**

## **2. COURSE DESCRIPTION**

One lesson entitled “Acute and chronic meningitis” is presented in the Neurology Committee for the third year medical students.

## **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for the third year medical students and given during the Neurology Committee. All the students are expected to complete the second year in the medical faculty successfully.

## **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

**At the end of the “Acute and chronic meningitis” lesson, students are expected to be able to:**

1. To learn the etiologic agents of acute and chronic meningitis,
2. To determine the tests (complete blood count, blood chemistry, acute phase reactants, cerebrospinal fluid examination) required to diagnose acute and chronic meningitis definitely,
3. To manage the medical treatment, duration of treatment and follow up procedures of a patient with a definitive diagnosis.

## **5. REFERENCES OF THE COURSE**

1. Principles and Practice of Infectious Diseases  
Gerald L.Mandell, John E. Bennett, Raphael Dolin
2. Infectious Diseases  
Jonathan Cohen, William G. Powderly
3. enfeksiyon Hastalıkları  
Ay e Willke Topçu, Güner Söyletir, Mehmet Do anay

## **6. FEATURES OF THE COURSE**

This course consists of one lecture entitled “Acute and chronic meningitis” (1 hours) and the duration of the lecture is 50 minutes.

## **7. Name of the Teaching Staff of the Course**

Prof. Dr. Funda Ergin Timurkaynak

## **8. THE LANGUAGE OF INSTRUCTION Turkish**

## 1. IDENTIFICATION OF THE COURSE

### OTOLARYNGOLOGY HEAD AND NECK SURGERY

## 2. DESCRIPTION

Basic information on the equilibrium, hearing loss and diagnostic methods, and vertigo are reviewed.

## 3. LEVEL

a. **Prerequisites:** None.

b. **Objectives:** The objective of the course is to teach the students the basic knowledge of anatomy and physiology of the structures of otolaryngology head and neck surgery, and aetiology, symptomatology, diagnosis and treatments of the pathologies of this region as well.

c. **Learning Outcomes:** The students should learn the basic concepts of otolaryngology head and neck surgery that they can use during their professional life as General Practitioners.

d. **References:**

#### Textbooks:

1. Cummings CW, Frederickson JM, Harker LA, Krause CJ, Richards MA, Schuller DE. (1998) *Otolaryngology Head and Neck Surgery*, Mosby, St. Louis Missouri.
2. Paparella MM, Shumrick DA, Gluckmann JL, Meyerhoff WL (1991) *Otolaryngology*, WB Saunders, Philadelphia.
3. Çelik O. (2002) *Kulak Burun Bo az Hastalıkları ve Ba Boyun Cerrahisi*, Turgut Yayıncılık, İstanbul.
4. Kaya S (2002) *Larenks Hastalıkları*, Bilimsel Tıp, Ankara.
5. Brackmann DE, Shelton C., Arriaga MA (1994) *Otologic Surgery*, WB Saunders Comp, Philadelphia.
6. Lore JM (1988) *Atlas of Head and Neck Surgery*, WB Saunders Comp, Philadelphia.

#### Articles:

1. Baloh RW.: Prosper Meniere and his disease. Arch Neurol 2001;58:1151-6.
2. Balkany T., Pillsbury H., Arenberg IK.: Defining and quantifying Meniere's Disease. Otolaryngologic Clinics of North America. 1980; 13: 589-595.
3. Fraysse B., Alonso A., House W. : Meniere's disease and endolymphatic hydrops: clinical-histopathological correlations. Annals of Otology Rhinology and Laryngology. 1980; 89 (Suppl 76) 2-22.
4. Atlas MD, Vhai F., Boscato L.: Meniere's disease: evidence of an immune process. Am J Otol. 1998; 19:628-631.

5. Derebery MJ., Valenzuela S.: Meniere's syndrome and allergy. Otolaryngologic clinics of North America. 1992; 25:213-224.

6. A unified hypothesis for vestibular dysfunction? Phillips JS, Prinsley PR. Otolaryngol Head Neck Surg. 2009 Apr;140(4):477-9. Review.

7. Benign paroxysmal positional vertigo: an overview. Boniver R. Int Tinnitus J. 2008;14(2):159-67. Review.

8. Vestibular rehabilitation therapy. Boyer FC, Percebois-Macadré L, Regrain E, Lévêque M, Taïar R, Seidermann L, Belassian G, Chays A. Neurophysiol Clin. 2008 Dec;38(6):479-87. Epub 2008 Oct 16. Review.

9. Hearing screening for newborns: the midwife's role in Early Hearing Detection and Intervention. Biernath K, Holstrum WJ, Eichwald J. J Midwifery Womens Health. 2009 Jan-Feb;54(1):18-26. Review.

#### **4. MANDATORY OR OPTIONAL COURSE**

These lectures are mandatory.

#### **5. TEACHING STAFF**

Seyra Erbek (Asoc. Prof. Dr.)

Fuat Buyuklu (Assoc. Prof. Dr.)

#### **6. LENGTH AND PERIOD**

The courses will be held in 2 hours. The topics of the courses are as follows.

1. Physiology of the equilibrium and vertigo
2. Hearing loss and diagnostic methods

#### **7. TEACHING AND LEARNING METHODS**

The courses will be held as lectures.

#### **8. ASSESSMENT**

Students will be responsible from all of the textbooks mentioned and handout notes. Students are encouraged to make extra readings. Students are expected to attend classes regularly. Each student will be evaluated according to his/her performance during daily educative applications. There will be a written final exam which will cover all of the topics mentioned above.

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

## **RADIOLOGY**

### **IDENTIFICATION OF THE COURSE**

Evaluation of brain diseases in Neuroradiology

Evaluation of spinal canal diseases in Neuroradiology

Radiology :Phase III Neuroradiology System Subject Committee ,Radiology Lectures;

- 1.Radiologic anatomy of central nervous system
- 2.Diagnosis in neuroradiology
- 3.Trauma
- 4.Brain development and congenital malformations
5. Radiology in stroke
- 6.Brain tumors
7. infections , white matter abnormalities , and degenerative diseases
- 8.Spinal cord normal anatomy and diseases

### **COURSE DESCRIPTION**

Included in the Neuroradiology subject committee ;the lectures aim to give the basic information on brain and spinal cord diseases to the students.Brain anatomy ,brain development ,tumors ,infections ,congenital and acquired abnormalities and spinal cord especially trauma and stroke are lectured.

### **LEVEL AND PREREQUISITES OF THE COURSE**

This lecture is only phase III students of medical faculty and is included in the Neuroradiology subject committee.

### **OBJECTIVES OF THE COURSE**

At the end of this course, the students are expected to be able to do the following:

1. Diagnostic methods used Neuroradiology
- 2.Basics in trauma radiology
- 3.Radiologic diagnosis in stroke
- 4.Algorithm in brain tumors and congenital abnormalities
- 5.Radiologic algorithm in degenerative diseases of spinal cord

## **REFERENCES OF THE COURSE**

1.Nöroradyoloji, Türk Manyetik Rezonans Derne i

2.Osborn Brain Anatomy

## **NAME OF THE TEACH NG STAFF OF THE COURSE**

Prof. Dr. Muhte em A ildere

## **THE PROPERT ES OF THE COURSE**

The course is composed of 2 (two) theorecital lectures of 50 minutes each.

## **THE LANGUAGE OF THE COURSE**

Turkish

## **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

### **3. Level: 345**

#### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

#### **c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

### **4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

### **5. Teaching Staff**

Selda Erdem Çekiç

## 6. Length and Period

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b>	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b>	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b>	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b>	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b>	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b>	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b>	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b>	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b>	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.

### **7. Teaching and Learning Methods**

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

### **8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).

<b>Name</b>	9 <sup>th</sup> Committee: LOCOMOTOR SYSTEM
<b>Status</b>	Compulsory
<b>ECTS credits</b>	5,1
<b>Responsibility</b>	Prof. Dr. Ihami KURU
<b>Prerequisite</b>	None
<b>Period</b>	3 weeks, 72 hours
<b>Content</b>	This course includes lectures on degenerative, traumatic and tumoral diseases of the bones, rheumatologic diseases, analgetic and antiinflammatory drugs
<b>Objectives</b>	<p>The objectives of the course is to familiarize students with the basic concepts and nomenclature in orthopedics and traumatology.</p> <p>To familiarize students with the basic concepts of physiology and biomechanics of locomotor system, and to provide basic information about the diagnostic and therapeutic approaches in musculoskeletal disorders.</p> <p>To familiarize the students with the pharmacology of non-steroidal anti-inflammatory drugs, spasmolytic drugs and drugs used in the treatment of gut disease.</p>
<b>Learning Outcomes</b>	<p>When the course completed students should learn the characteristics of normal gait and gait disorders, complications of immobilisation, basic biomechanical properties and disorders of spine and peripheral joints, causes, epidemiology and clinical characteristics of regional or diffuse musculoskeletal pain disorders and basic diagnostic, therapeutic and rehabilitative approaches to these disorders.</p> <p>At the end of the course students are expected to know, the definition, symptoms and signs, etiopathogenesis and the causes, risk factors for developing, complications, differential diagnosis, laboratories and radiologic tests for diagnosis, the prognosis and the treatment of rheumatologic diseases.</p> <p>The student is expected to get the basic knowledge about the ortopedic disease and learn the first-aid to a trauma patient.</p> <p>The student is expected to be able to explain the pharmacokinetic, pharmacodynamic properties, action mechanisms and the adverse and toxic effects of the non-steroidal antiinflammatory drugs, spasmolytic drugs and drugs used in the treatment of gut, and also to discuss the mechanism and pharmacological management of pain.</p>
<b>References of the Course</b>	<ol style="list-style-type: none"> <li>1. Rockwood and Green's Fractures in Adults; Eds. Bucholz R.W., Heckman J.D., Fifth Edition, Lippincott Williams &amp; Wilkins, 2001</li> <li>2. Rockwood and Wilkin's Fractures in Children; Eds. Beaty J.H, Kasser J.R., Fifth Edition, Lippincott Williams &amp; Wilkins, 2001</li> </ol>

	<p>3. Campbell's Operative Orthopaedics; Ed. Canale S.T., Tenth Edition, Mosby, 2003.</p> <p>4. Tachdjians's Pediatric Orthopaedics; Ed. Herring J.A, Third Edition, W.B.Saunders Company, 2002.</p> <p>5. Braddom RL. (2006) Physical Medicine and Rehabilitation. 3rd edition, Philadelphia: WB Saunders Company</p> <p>6. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.</p> <p>Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman &amp; Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.</p>
<b>Teaching and learning methods</b>	Theoretical, laboratory applications
<b>Assessment</b>	Theoretical Sınav (%95), Medical English (%5)
<b>Language</b>	Turkish

## 1. IDENTIFICATION OF THE COURSE

### **PED ATR C NEPHROLOGY AND RHEUMATOLOGY:**

## 2. DESCRIPTION

This course involves the theoretical pediatric nephrology lectures reviewing the pathogenesis, etiology, clinical signs and symptoms, diagnostic tools, therapeutic approach and complications of pediatric musculoskeletal system diseases, focusing specifically on the pathophysiologic basis of the diseases.

## 3. LEVEL

**a. Prerequisite:** None except for being successfully promoted from Phase II.

**b. Objectives:** The objective of the course is to familiarize the students with the pathophysiology, etiology, diagnosis and treatment of specific childhood rheumatologic diseases.

**c. Learning outcomes:** At the end of the MED-342 pediatric nephrology and rheumatology course, the student is expected to be able to discuss the pathogenetic and pathophysiologic mechanisms suggested to be the cause of autoimmune and rheumatic diseases. The student is also expected to know the diagnostic criteria, clinical signs and symptoms of polyarteritis nodosa, systemic lupus erythematosus, familial Mediterranean fever and juvenile rheumatoid arthritis and to discuss the diagnostic tools, differential diagnosis and treatment options of those diseases

**d. References:**

1. Cassidy JT, Petty RE, Laxer RM, Lindsley CB 2005. Pediatric Rheumatology, 5th ed, Elsevier Inc, Philadelphia, USA
2. Baskın E, Bakkaloglu A. Juvenil romatoid artrit. *Katkı Pediatri Dergisi* 1999;20: 752-766
3. Baskın E, Saatci U. Familial Mediterranean fever. *Current Rheumatol Rev* 2005 ;2:101-108

**4. THE STATUS OF THE COURSE:** This course is a mandatory course

**5. TEACHING STAFF OF THE COURSE**

Baskın Esra, MD (Professor of Pediatric Nephrology)

**6. THE PERIOD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lecture 1	Juvenile rheumatoid arthritis
Lecture 2	Familial mediterranean fever
Lecture 3	Systemic lupus erythematosus, polyarthritis nodosa

**7. TEACHING AND LEARNING METHODS**

lectures, class discussions

**8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED 342 pediatric nephrology and rheumatology questions in the committee exam due to the proportion of the course within the committee.

**8. LANGUAGE:** The language of the course is Turkish.

## **1. IDENTIFICATION OF THE COURSE**

### **INFECTIOUS DISEASES**

## **2. COURSE DESCRIPTION**

A lesson entitled “Treatment of septic arthritis and osteomyelitis” is presented in the Musculoskeletal System Committee for the third year medical students.

## **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for the third year medical students and given during the Musculoskeletal System Committee. All the students are expected to complete the second year in the medical faculty successfully.

## **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

**At the end of the “Treatment of septic arthritis and osteomyelitis” lesson, students are expected to be able to:**

1. To learn the etiologic agents of septic arthritis and osteomyelitis
2. To determine the empirical treatment of septic arthritis or osteomyelitis
3. To determine the specific treatment of septic arthritis or osteomyelitis after the etiologic agent is defined.

## **5. REFERENCES OF THE COURSE**

1. Principles and Practice of Infectious Diseases  
Gerald L.Mandell, John E. Bennett, Raphael Dolin
2. Infectious Diseases  
Jonathan Cohen, William G. Powderly
3. enfeksiyon Hastalıkları  
Ay e Wilke Topçu, Güner Söyletir, Mehmet Do anay

## **6. FEATURES OF THE COURSE**

This course consists of a lecture entitled “Treatment of septic arthritis and osteomyelitis” and with no laboratory applications. The duration of the lecture is 50 minutes.

## **7. THE LANGUAGE OF INSTRUCTION**

Turkish

## IDENTIFICATION OF THE COURSE

### PHARMACOLOGY

#### 1. DESCRIPTION

This course involves the theoretical pharmacology lectures reviewing the therapeutic approach to musculoskeletal system diseases, focusing on the pharmacokinetic and pharmacodynamic properties, action mechanisms, adverse and toxic effects of the drugs used in the treatment of musculoskeletal system diseases.

#### 2. LEVEL

- a. **Prerequisite:** None except for being successfully promoted from Phase II.
- b. **Objectives:** The objective of the course is to familiarize the students with the pharmacology of non-steroidal anti-inflammatory drugs, spasmolytic drugs and drugs used in the treatment of gut disease. central nervous system.
- c. **Learning outcomes:** At the end of the MED-342 PHARMACOLOGY course, the student is expected to be able to explain the pharmacokinetic, pharmacodynamic properties, action mechanisms and the adverse and toxic effects of the non-steroidal antiinflammatory drugs, spasmolytic drugs and drugs used in the treatment of gut, and also to discuss the mechanism and pharmacological management of pain.

#### d. References:

1. Kayaalp, S.O. 2005. Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, 11<sup>th</sup> Edition, Hacettepe-Ta Kitapçılık Ltd. ti., Ankara, Türkiye.
2. Hardman J.G. ve Limbird L.E. (editors) 2006. Goodman & Gilman's The Pharmacological Basis of Therapeutics, 11<sup>th</sup> Edition, McGraw-Hill, New York, U.S.A.
3. Brunton L., Parker K., Blumenthal D., Buxton I. 2008. Goodman & Gilman's Manual of Pharmacology and Therapeutics, International Edition, McGraw-Hill, New York, U.S.A.
4. Katzung B.G. 2004. Basic & Clinical Pharmacology, 9<sup>th</sup> Edition, Appleton & Lange, Stamford, U.S.A.

5. Rang H.P., Dale M.M., Ritter J. M., Moore P. K. 2003. Pharmacology, 5<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Loanhead, Scotland.
6. Bennett P.N., Brown M. J. (editors), 2003. Clinical Pharmacology, 9<sup>th</sup> Edition, Churchill Livingstone, Elsevier, Spain.
7. Bachman K.A. (editor), 2003. Drug Interactions Handbook, Lexi-Comp Inc., Hudson-Ohio, U.S.A.

**3. THE STATUS OF THE COURSE:** This course is a mandatory course

#### **4. TEACHING STAFF OF THE COURSE**

Müge Tecder-Ünal, MD, PhD (Assoc. Professor of Pharmacology)

#### **5. THE PERIOD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lectures 1-2	Non-steroid anti-inflammatory drugs
Lecture 3	Drugs used in gout
Lecture 4	Drugs used in spasmolytic therapy

#### **6. TEACHING AND LEARNING METHODS**

PHARMACOLOGY course will consist of lectures, class discussions

#### **7. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED 342-PHARMACOLOGY questions in the committee exam due to the proportion of the course within the committee.

**8. LANGUAGE:** The language of the course is Turkish.

# **1. IDENTIFICATION OF THE COURSE**

## **PHYSICAL MEDICINE AND REHABILITATION,**

### **2. DESCRIPTION**

This course reviews musculoskeletal diseases, especially regional pain syndromes, degenerative joint diseases, soft tissue rheumatism and immobilization syndromes. First of all the basic concepts about the physiology, biomechanics and pathomechanics of joints and gait will be examined. Then, causes, clinical characteristics and principles of management of regional pain syndromes, degenerative joint diseases, soft tissue rheumatism and immobilization syndromes will be evaluated. Finally therapeutic interventions and rehabilitation principles will be mentioned.

### **3. LEVEL**

- a) **Prerequisite:** None except for being successfully promoted from Phase II
- b) **Objectives:** The objectives of the course are to familiarize students with the basic concepts of physiology and biomechanics of locomotor system, and to provide basic information about the diagnostic and therapeutic approaches in musculoskeletal disorders.
- c) **Learning outcomes:** When the course completed students should ..... characteristics of normal gait and gait disorders, complications of immobilisation, basic biomechanical properties and disorders of spine and peripheral joints, causes, epidemiology and clinical characteristics of regional or diffuse musculoskeletal pain disorders and basic diagnostic, therapeutic and rehabilitative approaches to these disorders.

#### **d) References**

1. Akman MN, Karata M. (2003) Temel ve uygulan kinezyoloji. Ankara: Haberal E itim Vakfı.
2. Beyazova M, Gökçe-Kutsal Y. (2000) Fiziksel Tıp ve Rehabilitasyon, Ankara: Güne 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. Bunch WH, Keagy R, Kritter AE, Kruger LM, Letts M, Lonstein JE, Marsolais EB, Matthews JG, Pedegana LR (1985) American Academy of Orthopaedic Surgeons: Atlas of orthotics. 2nd edition, St Louis: The C.V. Mosby Company
6. Cailliet R. (1981). Pain series: Skoulder pain. 2nd edition, Philadelphia: F.A. Davis Company
7. Cailliet R. (1982). Pain series: Hand pain and impaitment. 3rd edition, Philadelphia: F.A. Davis Company
8. Cailliet R. (1988). Pain series: Foot and ankle pain. 4<sup>th</sup> edition, Philadelphia: F.A. Davis Company
9. Cailliet R. (1988). Pain series: Low back pain syndrome. 4<sup>th</sup> edition, Philadelphia: F.A. Davis Company
10. DeLisa JA, Gans BM, Walsch NE, Boskenek WL, Frontera WR. (2006) Rehabilitation Medicine: Principals and practise 4th edition, Philadelphia: Lippincott Williams&Wilkins

11. Loeser JD. (2001) Bonica's management of pain. 3rd edition, Philadelphia: Lippincott Williams & Wilkins
12. Ballantyne JC, Fishmann SM, Rathmell JP. (2009) Bonica's management of pain. 4th edition, Philadelphia: Lippincott Williams & Wilkins
13. Nickel VL, Botte MJ. (1992) Orthopaedic Rehabilitation. 2nd edition, New York: Churchill Livingstone
14. 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:** This course is a mandatory course

#### **5. TEACHING STAFF OF THE COURSE**

Metin Karata MD, Professor of PM&R  
Seyhan Sözü MD, Professor of PM&R  
Şehri Kılınc Aya MD, Associate Professor of PM&R  
Nuri Çetin MD, Associate Professor of PM&R  
Oya Yemi çi MD, Assistant professor of of PM&R  
Nur Co ar MD, Specialist of PM&R

#### **6. THE PERIOD AND THE PLAN OF THE COURSE**

This course consists of 11 lectures during 3 weeks period. Topics to be covered are as follows

1. Normal and pathological gait and posture
2. Biomechanical characteristics of lumbosacral spine and causes of low back pain
3. Causes of neck pain and shoulder pain
4. Causes of elbow, forearm and hand pain
5. Aging of the musculoskeletal system
6. Fibromyalgia and myofascial pain syndromes
7. Osteoarthritis
8. Causes of ankle and foot pain
9. Causes of hip and knee pain
10. Immobilization syndrome: Physiological and functional changes and effect of inactivity on body functions.
11. Orthotics, prosthetics and walking aids

#### **7. TEACHING AND LEARNING METHODS**

The course will consist of lectures and class discussions.

## **8. ASSESSMENT**

Students will be responsible from lectures. However, some supplementary books and reference textbooks are also suggested. Students are expected to attend classes regularly. At least 80% attendance is required. There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of Physical Medicine and Rehabilitation questions in the committee exam due to the proportion of the course within the committee. There will be a final exam at the end of the course.

**Language:** The language of the course is Turkish.

## 1. IDENTIFICATION OF THE COURSE

### NUCLEAR MEDICINE

## 2. DESCRIPTION

This course involves the use of nuclear medicine procedures in the diagnosis of musculoskeletal pathologies.

## 3. LEVEL

**a. Prerequisite:** None except for being successfully promoted from Phase II.

**b. Objectives:** The objective of the course is to familiarize the students with malignant and benign indications of bone scintigraphy and other nuclear medicine procedures used in the diagnosis of musculoskeletal pathologies.

**c. Learning outcomes:** At the end of the NUCLEAR MEDICINE course, the student is expected to be able to explain indications of bone scintigraphy, scintigraphic appearance in each pathology and other nuclear medicine procedures used in the diagnosis of musculoskeletal disorders.

### **d. References:**

1) Görpe A., Cantez S. (1992). Pratik Nükleer Tıp, stanbul Tıp Fakültesi Vakfı

2) Essential of Nuclear medicine Imaging, Ed. Mettler FA, Guiberteau MJ, 3rd Edition, Saunders Company, 1991

3) Wilson AW. (1998). Textbook of Nuclear Medicine, Lippincott-Raven

4. **THE STATUS OF THE COURSE:** This course is a mandatory course

## 5. TEACHING STAFF OF THE COURSE

Ay e Akta , MD (Professor of Nuclear Medicine)

## 6. THE PER OD AND THE PLAN OF THE COURSE

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lectures 1	Nuclear Medicine in malignant skeletal pathologies
Lecture 2	Nuclear Medicine in benign skeletal pathologies

**7. TEACHING AND LEARNING METHODS**

NUCLEAR MEDICINE course will consist of lectures, class discussions

**8. ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of MED 386-NUCLEAR MEDICINE questions in the committee exam due to the proportion of the course within the committee.

**8. LANGUAGE:** The language of the course is Turkish.

## **INTRODUCTION TO ORTHOPAEDICS AND TRAUMATOLOGY**

### **1. DESCRIPTION**

This course reviews basic subjects in orthopaedics and traumatology. After a brief overview of the course, the course deals with both congenital and developmental orthopaedic diseases as well as fractures and orthopaedic implications of systemic diseases. The subjects are introduction to orthopaedics and traumatology.

### **2. LEVEL**

**a. Prerequisites:** None.

**b. Objectives:** The first objective of the course is to familiarize students with the basic concepts and nomenclature in orthopedics and traumatology. The second objective is to help students to learn how to search for more information in literature.

**c. References:**

#### Textbooks

1) Rockwood and Green's Fractures in Adults; Eds. Bucholz R.W., Heckman J.D., Fifth Edition, Lippincott Williams & Wilkins, 2001

2) Rockwood and Wilkin's Fractures in Children; Eds. Beaty J.H, Kasser J.R., Fifth Edition, Lippincott Williams & Wilkins, 2001

3) Campbell's Operative Orthopaedics; Ed. Canale S.T., Tenth Edition, Mosby, 2003.

4) Tachdjians's Pediatric Orthopaedics; Ed. Herring J.A, Third Edition, W.B.Saunders Company, 2002.

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

smail Cengiz Tuncay, M.D. Prof.

Hüseyin Demirörs, M.D. Prof.

lhami Kuru, M.D. Prof.

Rahmi Can Akgün, MD. Assoc. Prof .

Orçun ahin, MD

### **5. LENGTH AND PERIOD**

This course is a three weeks course. Topics to be covered are as follows:

Lecture 1	<b>Treatment Strategies Approach to Trauma patients;</b> Basic aspects of first aid, to do and not to do's, basic life support systems, approach to open and closed fractures
Lecture 2	<b>Lower extremity fractures</b>
Lecture 3	<b>Congenital displacement of the hip</b>
Lecture 4	<b>Upper extremity fractures</b>
Lecture 5	<b>Childhood and Congenital foot deformities;</b> Postural foot deformities, Clubfoot; Etiology, Diagnosis, Treatments and Differential diagnosis, Associated diseases
Lecture 6.	<b>Mechanisms of Fracture healing, principles of stabilization and fixation</b>
Lecture 7	<b>General principles of bone and muscle tumors</b>
Lecture 8	<b>Basic terminology of biomechanics and the biomaterials used in orthopaedic science</b>
Lecture 9	<b>Childhood fractures and the properties of child bone</b>
Lecture 10	<b>Absence of extremities, congenital anomalies, genetic, metabolic and hematologic problems</b>
Lecture 11	<b>Differential diagnosis of arthritis, avascular necrosis and surgical treatment</b>
Lecture 12	<b>Open fractures</b>
Lecture 13	<b>Adult age osteomyelitis and spinal infections</b>
Lecture 14	<b>Neuromuscular problems</b>
Lecture 15	<b>Sports injuries</b>
Lecture 16	<b>Upper extremity neural traumas, entrapment neuropathies and problems with brachial plexus</b>

Lecture 17	<b>Deformities of foot and ankle</b>
Lecture 18	<b>Shoulder and elbow diseases</b>

## **6. TEACHING AND LEARNING METHODS**

The course will consist of lectures and class discussions.

## **7. ASSESSMENT**

Students will be responsible from all lectures. Class participation is a vital component of this course. Students are expected to attend classes regularly. At least 90 % attendance is required. Students are expected to read the assigned material in advance to be ready to participate to class discussions.

There will be a final exam. The final exam will cover all topics.

**8. LANGUAGE:** The language of the course is Turkish.

## **PATHOLOGY**

### **1. DESCRIPTION**

This course deals with pathologic basis of musculoskeletal system diseases as well as immunologic 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 the pathology of musculoskeletal system diseases and to help them to develop an understanding of the major organ pathologies using immunologic, molecular and pathophysiologic mechanisms.

**c. Learning of outcomes:** At the end of the course, the student is expected to be able to understand general pathogenesis and morphology of musculoskeletal system diseases.

**d. References:**

1. Pathologic Basis of Disease; Eds. Cotran R.S., Kumar V.K., Collins T., Sixth Edition, W. B. Saunders Company, 1999
2. Histology for Pathologist; Ed. Sternberg S. S., First Edition, Raven Press, New York, 1992
3. Ackerman's Surgical Pathology; Ed. Rosai J., 8<sup>th</sup> Edition, Mosby, 1996
4. Pathology of Bone and Joint Disorders; Eds. McCarthy and Frassica; First Edition, W. B. Saunders Company, 1998

### **3. MANDATORY OR OPTIONAL COURSE**

This course is a mandatory course.

### **4. TEACHING STAFF**

Özlem Özen, Assoc. Prof. Dr.

Ay en Terzi, MD

### **5. LENGTH AND PERIOD**

This course includes 8 hours of lectures. Topics to be covered are as follows:

**Committee 9:** Musculoskeletal system

Lecture 1	Pathology of infections of bone
Lecture 2	Diseases of joints
Lecture 3	Osteoporosis and fracture healing
Lecture 4	Soft tissue tumors
Lecture 5	Bone tumors
Lecture 6	Diseases of skeletal muscle
Lecture 7	Skin tumors
Lecture 8	Laboratory session of bone, joints and soft tissue

## **6. TEACHING AND LEARNING METHODS OF THE COURSE**

This course includes lectures, class discussions and laboratory practises

## **7. ASSESSMENT METHODS OF THE COURSE**

The students are responsible from all the lectures. If it is necessary students will be oriented to reference books. It is expected for all students to attend all the lectures. At the end of each committee each student will take multi-choice exam.

## **8. THE LANGUAGE OF INSTRUCTION**

Turkish.

## 1. IDENTIFICATION OF THE COURSE

### **PLASTIC AND RECONSTRUCTIVE SURGERY:**

## 2. DESCRIPTION

This course involves the theoretical lectures of plastic and reconstructive surgery related to musculoskeletal system which reviews trauma and repair biology, principles of tissue transplantation, basics of graft and flap surgery as well as benign and malignant skin tumors.

## 3. LEVEL

- a. Prerequisite:** None except for being successfully promoted from Phase II.
- b. Objectives:** The objective of the course is to teach repair mechanisms of tissues following injury, surgical treatment of tissue defects and treatment choices of skin tumors.
- c. Learning outcomes:** At the end of the PLASTIC AND RECONSTRUCTIVE SURGERY course, the student is expected to comment about tissue injury and repair biology, basics of tissue transplantation, principles of graft and flaps and benign and malignant skin tumors. They will be able to discuss surgical treatment of defects following trauma and skin tumor excision.
- d. References:**
  - i. Glat P.M., Longaker M.T. Wound Healing. In: Aston S.J., Beasley R.W., Thorne C.H.M., eds. Graab and Smith's Plastic Surgery. Philadelphia: Lippincott-Raven; 1997:3-12.
  - ii. Place M.J., Herber S.C., Hardesty R.A. Basic Techniques and Principles in Plastic Surgery. In: Aston S.J., Beasley R.W., Thorne C.H.M., eds. Graab and Smith's Plastic Surgery. Philadelphia: Lippincott-Raven; 1997:13-25.
  - iii. Gürler T. Yara yile mesi. Estetik, Plastik ve Rekonstrüktif Cerrahi . Editör: Ça da A. Ege Üniversitesi Basımevi, 1. baskı, 2003: 17-25.
  - iv. Alper M. Deri Greftleri , Deri A ıları. . Estetik, Plastik ve Rekonstrüktif Cerrahi . Editör: Ça da A. Ege Üniversitesi Basımevi, 1. baskı, 2003:31-45.
  - v. Alper M. Flepler. Estetik, Plastik ve Rekonstrüktif Cerrahi . Editör: Ça da A. Ege Üniversitesi Basımevi, 1. baskı, 2003:47-62.

4. **THE STATUS OF THE COURSE:** This course is a mandatory course

5. **TEACHING STAFF OF THE COURSE**

Hüseyin Borman, MD. (Professor of Plastic and Reconstructive Surgery)

Nilgün Markal Erta , MD. (Assoc. Professor of Plastic and Reconstructive Surgery)

6. **THE PER OD AND THE PLAN OF THE COURSE**

This course is a one-committee course, which consists of 3 weeks. Topics to be covered are as follows:

Lectures 1	Tissue injury and repair biology
Lecture 2	Benign and malignant tumors of skin
Lecture 3	Skin grafts and principles of tissue transplantation, skin flaps and principles of composite flaps

7. **TEACHING AND LEARNING METHODS**

PLASTIC AND RECONSTRUCTIVE SURGERY course will be consisted of lectures, class discussions

8. **ASSESSMENT METHODS AND GRADING OF THE COURSE**

There is not any specific examination for the course. Instead, the committee examination includes multiple choice questions dealing with related topics within the course. Phase III Coordination Office determines the ratio of the total number of PLASTIC AND RECONSTRUCTIVE SURGERY questions in the committee exam due to the proportion of the course within the committee.

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

## **1. IDENTIFICATION OF THE COURSE**

### **RHEUMATOLOGIC DISEASES**

#### **MUSCLE AND SKELETAL SYSTEM COMMITTEE**

## **2. COURSE DESCRIPTION**

Fifteen lessons entitled ‘Laboratory in Rheumatologic Disease (two lesson)’, ‘Rheumatoid Arthritis (two lesson)’, ‘Spondyloarthropathies (two lesson)’, ‘Vasculitides (three lessons)’, ‘Systemic Lupus Erythematosus and Antiphospho-lipid syndrome (two lesson)’, ‘Crystal arthropathies (one lesson)’, ‘Disease Modifying Antirheumatic Drugs (one lesson)’, ‘Rheumatic complications of systemic diseases (one lesson)’, ‘Other connective Tissue Disorders (one lesson)’ are presented in the Muscle and Skeletal System Committee for the third year medical students.

## **3. LEVEL AND PREREQUISITIES OF THE COURSE**

This course is only for the third year medical students and given during the Muscle and Skeletal System Committee. All the students are expected to complete the second year in the medical faculty successfully.

## **4. OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE**

**At the end of the course students are expected to know,**

1. Definition
2. The symptoms and signs
3. Etiopathogenesis and the causes
4. Risk factors for developing
5. Understand the complications effects
6. Make differential diagnosis
7. Laboratories and radiologic tests for diagnosis
8. The prognosis
9. Treatment and drugs of these inflammatory systemic Rheumatologic diseases..

## **5. REFERENCES OF THE COURSE**

1. Kelley’s Textbook of Rheumatology 8.th Edition
2. Oxford Textbook of Rheumatology 2 th Edition
3. Arthritis and Allied Conditions. 14.th Edition
4. Rheumatology Textbook. By Hochberg MC, Silman AJ, Smolen JS, Weinblatt ME, Weisman MH. 3 th Edition

## **6. FEATURES OF THE COURSE**

This course consists of 14 lectures entitled with no laboratory applications. The duration of each lecture is 50 minutes.

## **7. THE LANGUAGE OF INSTRUCTION**

Turkish

## **RADIOLOGY**

### **1. Identification**

-Radiology of the Musculoskeletal system

### **2. Description**

To impress the usefulness of radiology in the diagnosis of the musculoskeletal system pathologies, and describe some specific radiological findings in musculoskeletal system diseases.

### **3. Level**

To teach the basic level radiological knowledge for using it during their daily clinical practice.

### **4. References of the Course**

-Radiology Review Manual, 2007, Sixth Edition, Wolfgang Dahnert.

-Klinik radyoloji, 2002, Nobel Güne Kitabevi, Ercan Tuncel.

### **5. Compulsory or elective course units**

TIP 391 is a compulsory course

### **6. Teaching staff**

N. Ça la Tarhan, MD; Professor of Radiology

### **7. Length and period**

TIP 391 is a course consisting of 2 lessons each 50 minutes in Musculoskeletal system committee.

### **8. Teaching and learning methods**

TIP 391 include lectures with slide shows and discussion with case presentations.

### **9. Assessment Methods and Grading of the Course**

Students are tested by multiple choice questions at the end of the course for analysing their knowledge in musculoskeletal system radiology.

### **10. The Language of Instruction**

Turkish

### **11. ECTS credit allocation**

## **I. Identification of the course:**

### **ENGLISH FOR SPECIFIC PURPOSES III FOR FACULTY OF MEDICINE**

#### **2. Course Description**

The course is an EAP / ESP oriented English course which is designed to cater the needs of students who study at the Faculty of Medicine. The course mainly focuses on all four skills of language: reading, writing, listening and speaking. Lexical studies and grammar are also dealt with both for recognition and production purposes. Language and skills are not only improved but also practiced in an integrated manner. Skills are observed as receptive and productive. Productive skills such as writing, particularly emphasizes conventions of academic writing, case report writing, research paper writing, hospital report writing through process approach. In addition, stylistics, mechanics, coherence and unity are given attention. Speaking mainly focuses on classroom discussions, case studies, descriptions and short presentations, which encourage students to express them in different academic and professional contexts. Receptive skills of reading and listening both focus on reading / listening for the main idea, specific information, deducing meaning from contextual clues, and transferring information into visual representations such as charts, graphs, etc. Reading particularly emphasizes predicting, scanning, skimming, and referencing and recent articles from some medical journals are studied and dealt with. The course enables students to build lexicon, which involves subject specific and academic topics. Language competence is improved by practicing basic language structures and functions. Translation techniques are also taught and practiced on sentence / paragraph level. Students are also taught text techniques in preparation for some exams such as ÜDS-KPDS-TOEFEL.

#### **3. Level: 345**

##### **a. Prerequisite**

Upper Intermediate- Advanced Level of English.

**b. Objective:** The aim of the course is to equip students with academic and subject specific language skills, which are necessary for their studies and future careers and also to help students develop positive attitude toward the target language. To orient students to reading original medical articles from various medical journals. To orient them towards some exams, such as TOEFEL, ÜDS and KPDS, which they are likely to encounter in the future. To teach them some test taking skills. To teach them some translation skills; from Turkish to English and from English to Turkish.

##### **c. Intended Learning Outcomes**

At the end of this course the learner is expected to demonstrate detailed understanding of academic and professional contexts. He/she is also expected to acquire writing skills such as case report writing, research paper writing and hospital report writing. At the same time he /she is expected develop some test taking skills. He/she is expected to make translations from Turkish to English and from English to Turkish.

**d. References:** English for Medicine Booklet III, compiled by Curriculum Department Unit of English Language department, 2008.

#### **4. Compulsory or Elective Course**

Is a compulsory course for students in the Faculty of Medicine.

## 5. Teaching Staff

Selda Erdem Çekiç

## 6. Length and Period

Is a two-semester course 3 hours per week

Committees	Contents
<b>Committee 1.</b>	Scientific Papers-Case Reports- A case report: Rickettsialpox in North Carolina- Clinical Practice: Concussion-A Vocabulary Test- Translation from Turkish to English-Test on Tenses-
<b>Committee 2</b>	Research Paper-Traditional Abstract vs. Structured Abstract-Example Abstracts-Lenadomide-The phoenix Rises, an article from NEJM-Vocabulary Test, synonyms-Translation from Turkish to English-Developing Test Techniques-Sentence Completion- Hospital Reports
<b>Committee 3</b>	Examples of Hospital Reports- Assessing Doctors at work- Progress and Challenges, an article from NEJM,-Outcomes 18 Months after the First Human Partial Transplantation, an article from NEJM-Vocabulary Test-Translation-Developing Test techniques, Paragraph Completion-
<b>Committee 4</b>	The healing power of Listening in the ICU-an article from NEJM-Vocabulary studies-Consent for Organ Donation, article from NEJM-Translation from Turkish to English-Vocabulary Test- Developing Test Techniques, Cloze Tests
<b>Committee 5</b>	Cesarean Delivery and the Risk and Benefit Calculus, an article from NEJM, 6 parts of vocabulary study-Pharmacogenetics, ready for prime time?, an article from NEJM-Grammar, coordinating conjunctions transition words, adverbial clauses-Developing Test Techniques, finding the irrelevant sentence- Obesity and Diabetes in the Developing World, an article from NEJM, In Search of New Ideas for Health, a reading from NEJM-Translation from Turkish to English-A test on adverbial clauses, and linking words
<b>Committee 6</b>	Developing Test Techniques, finding the best answer to a given situation-Vocabulary Study- Etiquette Based Medicine, a reading from NEJM-Small paragraphs from KPDS-A vocabulary Test-Grammar, Conditional Sentences-Translation from Turkish to English-Test on Conditional sentences-Developing Test Techniques, restatement questions
<b>Committee 7</b>	Stranded in the Periphery, an article from NEJM-Vocabulary Studies on synonyms, antonyms, medical vocabulary-Firefighting and Death from Cardiovascular Disease, an article from NEJM-Grammar, relative clauses; translations from Turkish to English-Test on relative clauses-Developing Test Techniques, Dialogues-
<b>Committee 8</b>	Vaccines and Autism Revisited, an article from NEJM-Vocabulary Studies-Paragraphs from ÜDS-Grammar: Gerunds, Infinitives, Noun Clauses-Translation from Turkish to English-Test on Gerunds, Infinitives and Noun Clauses-Developing Test Techniques, translations
<b>Committee 9</b>	Autism, a reading from ÜDS-A test on some confusing words-Readings from Medical College Admission Tests-Renal Failure- What is Bird Flu?, readings-Vocabulary Test-Grammar, active, passive and causative structures, translation from Turkish to English,-A test on active passive and causative structures.

**7. Teaching and Learning Methods**

The teaching method is eclectic and functional, including lectures, class discussions, reading original and recent medical articles, writing, developing test techniques.

**8. Assessment**

Student progress is assessed through written exams, one for committee and one final at the end of the academic year, each counting as 5% (5 points out of 100).