MED 5010–Pulmonary Medicine

Course Name	Code	Semester	Type of course	Theory (hours)	Group work (hours)	ECTS
Pulmonary Medicine	MED 5010	X	Mandatory	15	26	3
Faculty, the educational program and education level	Faculty of Medicine, one-cycle Educational Program "Medicine"					
Author (s)	**Kakha Vacharadze** –Professor, Doctor of Medicine Mob.tel.: 599 57 75 76; e-mail: kakhavacharadze@yahoo.com Consultation day and time - individually					
Educational course format	Lecture Group Work					
Educational course Loading	**Total:** 90 hours **Contact hours**: 45 h, that includes: 1. Lecture – 15 h 2. Team work – 26 h 3. Midterms – 2 h 4. Final exam -2 h **Independent work** – 45 h					
Prerequisites	MED 2007- Circulatory and Respiratory System Disorders					
The purpose (s) of tutorial course/modules	Students will received deep and systematic knowledge about the pulmonology course, will learn the diagnostic and therapeutic strategies and latest technological improvements, and will have experience in basic knowledge, skills and attitudes in that field.					
Teaching and learning methods	**Lecture - Face-to-Face -** verbal contact, slides for the lecture will be provided with Power Point **Demonstration** –models, simulators, slides and other visual aids; Report preparation and presentation in group with the following discussion and analysis of it; **Discussion** – questions and answers, answers analysis supported with practical facts; **Analyses and synthesis** –detailed discussion of aimed problem, assessment of each others point of view; **Practical skills** on the base of clinic: respiratory system/ pulmonology diseases clinical pictures, diagnostics and treatment of chronic and acute respiratory organs diseases, doctors' assistance, patients care. **Brief-inquire** –short questions and answers **Work with additional literature**: additional literature, periodical issues and internet information technology sources; **Consultation** –individual support work with students (weekly)					
Assessment criteria	**Maximum score- 100:** 1. **Midterm assessment -60 scores ,** that includes:					

1.1. Attendance -**10 scores;**

1.2. Activity – **30 scores:**

1.2.1. Practical skills on the base of pulmonology cabinet of clinic –(13x1)= **13 score**

1.2.2. Brief-inquire (7 X 1 = **7 scores**);

-1 score- the question is answered fully and reasonably;

-0.5 score - incomplete answers;

-0 score -no answer;

1.2.3.Medical documentation management - **10 scores**

1.3. Midterm Exam – 20 scores

Example of Medical Documentation Management and Assessment– max 10 scores

10-9 scores- the task is understood properly, medical history component, clinical picture and diagnostics data, diagnosing and the treatment scheme is adequate and all the steps are described in consequential order; list of drugs is appointed properly with correct name and dozes;

8-7 scores - the task is completely understood, medical history component, clinical picture and diagnostics data, diagnosing and the general steps treatment is assembled in consequential order;

6-5 scores -the task is completely understood, but medical history component, clinical picture and diagnostics data, diagnosing and the general steps treatment is assembled in no consequential order;

4-3 scores – the task is not completely understood, medical history component, clinical picture and diagnostics data, diagnosing and the general steps treatment is assembled in no consequential order;

2-1 score – Student demonstrates misunderstanding and no complete skills of medical history taking

0 score- Student is not able to complete the task

Midterm Exam – 20 scores

Written test -20 question, 1 score for each – max. 20;

Minimal scores of midterm assessment (for final exam) – is 11.

2. Final Exam -40 scores

Is held in the written test form (test consists of 40 questions, each question is rated as 1 score).

The final exam would accounted as passed in case of maximum 70% or more (40X70 / 100 = 28 scores).

Credit will be given to the student if he has collected at minimum 51 scores out of 100.

Student's assessment has to be done in the following way:

Positive rate:

- (A) Excellent- 91 or more scores;
- (B) Very Good- 81-90 scores;
- (C) Good- 71-80 scores;
- (D) Satisfactory- 61-70 scores;
- (E) Enough- 51-60 scores;

Negative rate:

- (FX) Failure - 41-50 scores, which means that a student needs to work more and an independent and considerable further work is required to pass the exam once again to be re-awarded;
- (F) Fail – 40 scores or less, which means that the student's diligence is not sufficient and student has to learn the subject all over again.

Student can pass the additional exam during the same semester.

The time interval between the final and the additional exams should be not less than 10 days.

The basic literature	1. Edited by: Dan.L.Longo; Dennis Kasper Dennis L. **Harrison's Principles of İnternal medicine V-I, V-II.** McGrow Hill Medical. XVIII ed, 2012.
The auxiliary literature	2. Christopher H. Fanta, Elisabeth S.Stieb, Elaine L. Carter, Kenan E. Haver. **The Asthma Educator's Handbook,** McGrawHill Medical Partners Asthma Center, 2007; 3. Jonathan Cohen William G.Powderly Steven M. Infectious diseases Volume I. II, Mosby Elsevier, 2010; 4. Fiona R.Prabhu & Lynn S.BickleyGuide to Physical Examination and History of Taking, Lippincott Williams&Wilkins, IX, 2007; 5. MAXINE A.PAPADAKIS, STEPHEN J.MCPHEE ASSOC. CURRENT MEDICAL DIAGNOSIS & TREATMENT, MCGRAWHILL EDUCATION LANGE, 2014

The tutorial/training course content

№	Subjects	Lecture (hour)	Work in group (hour)
1	Introduction to Pulmonology. Physical and instrumental Diagnostics methods in Pulmonology	1	2
2	Hereditary diseases affecting the lungs (cystic fibrosis, alpha 1-antitrypsin deficiency)	1	3
3	Exposure to toxins (tobacco smoke, asbestos, exhaust fumes, coal mining fumes). Exposure to infectious agents (certain types of birds, malt processing) an autoimmune diathesis that might predispose to certain conditions (pulmonary fibrosis, pulmonary hypertension)	2	3
4	Pneumonia	2	3
5	Lung abscesses, Acute Bronchiolitis, Lung's infarct. Pneumothorax.	2	3
	Midterm Exam		2
6	Cancer of lungs. Sarcoidosis. Silicosis. Emphysema.	2	3
7	Lungs chronical obstructive disease. Asthma: classification, clinical picture, diagnosing, treatment.	2	3
8	Tuberculosis - global health problem; historical notes, current situation, causes of epidemics and ways of control. Etiology of tuberculosis, source of infection. Transmission, risk factors, risk groups, pathogenesis of TB; get infected, disease, immunological answer, morphology. Clinical, morphological and radiological forms of pulmonary TB (disseminated, focal, infiltrative, cavernous, tuberculoma; chronic forms: fibrotic –cavernous, cirrhotic), the peculiarities of clinical course, radiological picture, diagnostics, treatment and prevention measures.	2	3

9	Cardiothoracic surgeon and pulmonary rehabilitation	1	3
	Final Exam		2

Learning Outcomes

Criteria	Competences
Knowledge and Understanding	At the end of this clerkship student will have deep and consistent knowledge about respiratory system diseases ethiology, pathogenesis, clinical pictures, diagnose, treatment and prevention methods.
Applying knowledge	Student will be able to provide: • patients history taking and patient care; • patients examination: laboratory investigation of blood (arterial blood gas measurement); auscultation and percussion, spirometry; bronchoscopy; chest X-rays; CT scanning; scintigraphy; surgical procedure assisting under –doctor-supervisor control;
Judgement making	Student ıs able to evaluate the relationship between sick children, their family and the doctor. Can critically assess complex and controversial data, independently analyze and render the conclusions based on the analysis, can apply in practice the deductions, has a critical approach to new information, can integrate various data and sum them up to come to package solution, come up with arguments and counter arguments while analyzing the obtained results.