

**MED 2007- Cardiovascular and Respiratory System Disorders**

Course Name	Code	Semester	Type of course	Theory (hours)	Work in Group (hours)	ECTS
Cardiovascular and Respiratory System Disorders	MED 2007	III	Mandatory	25	46	5
Faculty, the educational program and education level	Faculty of Medicine, one-cycle Educational Program “Medicine”					
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Educational course format	Lecture Work in group					
Educational course Loading	<p><b>Total:</b> 150 hours  <b>Contact hours:</b> 75 h</p> <ol style="list-style-type: none"> <li>Lecture – 25h</li> <li>Group work – 46 h</li> <li>Midterms – 2 h</li> <li>Final exam -2 h</li> </ol> <p><b>Independent work</b> – 75 h</p>					
Prerequisites	MED 1007- Cardiovascular and Respiratory System					
The purpose (s) of tutorial course/modules	The aim of this present course is to gain knowledge on the pathogenesis of the disorders related to cardiovascular and respiratory system. The signs and symptoms of cardiovascular and respiratory system disorders, related risk factors, prevention, diagnosis, the modern methods and principles of treatment and rehabilitation will also be discussed.					
Teaching and learning methods	<p><b>Lecture - Face-to-Face</b> - Lecture notes and readings  <b>Demonstration</b> - illustrations, slides and other visual aids;  <b>Discussion</b> – questions and answers, answers analysis supported with visual aids;  <b>Abstract preparation and presentation</b> - Students choose material from provided problematic topics or independent way, process sufficient material, will work with the books and presents in auditorium for estimation;</p>					

	<p><b>Analyses and synthesis</b> of different medical cases;</p> <p><b>Practical work</b> on the clinic base : cardiovascular and respiratory organs disorders clinical pictures, diagnosing and treatment methods;</p> <p><b>Brief-inquire</b> -short questions and answers.</p> <p><b>Work with additional literature</b> –independent work with additional literature to deep knowledge about new achievement in this field of area.</p> <p><b>Consultation</b> –individual support work with students (weekly)</p>
<p><b>Assessment criteria</b></p>	<p><b>Maximum score- 100:</b></p> <p><b>Midterm assessment -60</b></p> <p>Attendance -<b>10 scores</b> (0.4X25=10 scores);</p> <p>Activity in group – <b>10 scores</b></p> <p>Discussions – <b>10 scores</b></p> <p>Brief-inquire (10 X 1 =10 scores);</p> <p><b>Midterm Exam – 20 scores</b></p> <p><b>Group Work Assessment Based on the Following Criteria</b> (maximum 10 scores)</p> <p>10 scores - Student has been able to present complete and thorough knowledge of the subject, a substantial amount of detailed and relevant information. Demonstrate considerable depth of understanding of the studied main and additional literature. Bring forward a balanced view of the main arguments on the issues.</p> <p>9 scores - Student has been able to bring forward a consistent number of deductions on most of the topics tackled. make very good comments on the different perspectives on most of the issues. Demonstrates knowledge of the main readers.</p> <p>8 scores - Student has been able to bring forward a consistent knowledge, Has properly developed terminology. Demonstrates knowledge of the main readers.</p> <p>7 scores - Student has been able to present some factual information sufficiently linked with the topic. demonstrate a good understanding of the topics selected. make a good attempt to bring forward a balanced view of some arguments on the issues. Terminology is partially developed.</p> <p>6 scores - Student has been able to make some good comments on the different perspectives on some of the issues. Make poor deductions on most of the topics tackled. analyse some causes and results of human interactivity related to the issues.</p> <p>5 scores - Student has been able to demonstrate inconsistent comments on the different perspectives on some of the issues. Terminology is partially developed. Present mediocre level of knowledge. Make poor deductions.</p> <p>4 scores - Student demonstrates general overview of the topics. Terminology is not developed. Information sufficiently linked with the topic. Demonstrate irrelevant understanding of the literature.</p> <p>3 scores – Student demonstrates general/superficial and inconsistent knowledge of the subject. No sufficient knowledge of the literature.</p> <p>2 scores - Student demonstrates general comments, no knowledge of the terminology, no consistency.</p> <p>1 score – Student demonstrates insufficient answer, not terminology awareness, chronologic manner of the answer, mostly wrong, no knowledge of literature.</p> <p>0 scores: Student demonstrates not even elementary knowledge of the topics.</p>

	<p><b>Discussion – grading criteria (maximum 10 scores)</b></p> <ul style="list-style-type: none"> <li>• Critical thinking- 2 sc;</li> <li>• Culture of debates - 2 sc;</li> <li>• Argumentativeness - 2 sc;</li> <li>• Time management - 2 sc;</li> <li>• Academic and visual side of the presented material - 2 sc.</li> </ul> <p><b>Brief –inquire – grading criteria (maximum 1 score)</b></p> <p>-1 sc – gives full and argumentive answers;</p> <p>-0,5 sc – gives incomplete answers;</p> <p>-0 sc – gives no answers.</p> <p><b>Midterm Exam</b> is held in combined form: the written test – 15 questions, each question is rated as 1 score – max. 15 scores; verbal – 5 questions, each question is rated as 1 score.</p> <p>Minimal score of midterm assessment (for final exam) – is 11; to take in account that student will receive the maximum score at the final exam.</p> <p style="text-align: center;"><b>Final Exam -40</b></p> <p>Is held in the written test form (test consists of 80 questions, each question is rated as 0.5 scores). Students have to score equal or more than 70% from final exam maximum score (40X70/100=28 maximum 28 scores from the overall 40) to pass the final examination.</p> <p>Credit will be given to the student if he has collected at minimum 51 scores out of 100.</p> <p>The students’ assessment has to be done in the following way:</p> <p><b>Positive rate:</b></p> <ul style="list-style-type: none"> <li>• (A) Excellent- 91 or more scores;</li> <li>• (B) Very Good- 81-90 scores ;</li> <li>• (C) Good- 71-80 scores;</li> <li>• (D) Satisfactory- 61-70 scores ;</li> <li>• (E) Enough- 51-60 scores;</li> </ul> <p><b>Negative rate:</b></p> <ul style="list-style-type: none"> <li>• (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;</li> <li>• (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.</li> </ul> <p>The student can pass the additional exam during the same semester.</p> <p>The time interval between the final and the additional exams should be not less than 10 days.</p>
<p><b>The basic literature</b></p>	<ol style="list-style-type: none"> <li>1. Edited by: A.John Camm, Thomas Luscher &amp; Patric W.Surruys The ESC (European Society of Cardiology) <b>Textbook of Cardiovascular Medicine</b>, Oxford University Press II Edition, VII, 2010;</li> <li>2. KV Krishna Das. <b>Textbook of Medicine</b> (Volume I,II), Jaypee, 2004</li> </ol>
<p><b>The auxiliary literature</b></p>	<ol style="list-style-type: none"> <li>1. Keith L.Moore, Arthur F.Dalley. Anne M.R.Agur -Clinically Oriented Anatomy, Wolters Cluwer Health Lippincott Williams&amp;Wilkins, 2008;</li> <li>2. Michail Schuenke, Erik Schulte, Udo Schumacher -Atlas of Anatomy (Neck and Internal Organs), Thieme, 2006; Richard S. Snell - Clinical Anatomy (An Illustrated review with Questions and explanations, Lippincott Williams&amp;Wilkins, 2003;</li> <li>3. Kim E.Barret, Susan M.Barman Scott Boitano, Heddwen L.Brooks - Ganong's Review of</li> </ol>

Medical Physiology, McGrawHill Lange, 2012;

**The tutorial/training course content**

Nº	Subjects	Lecture (hour)	Work in group (hour)
1	Basic pathology, genetic and molecular mechanism of pulmonary diseases, related risk factors, prevention, diagnosis, and principles of treatment of chronic obstructive and interstitial lung diseases , tuberculosis and malignancies of lung.	5	8
2	Symptoms and signs in chest diseases, allergic respiratory diseases, respiratory tract infections, treatment principles, epidemiology of these disorders	5	10
3	Basic pathology, genetic and molecular mechanism of cardiovascular diseases, hypertension, valvular heart diseases, infective endocarditis and coronary artery disease	5	8
	<b>Midterm Exam</b>		2
4	Symptoms and signs of myocarditis, pericarditis, heart failure and rhythm disorders, atherosclerosis, treatment principles, epidemiology of these disorders	5	10
5	Pharmacology properties of drugs used in the treatment of Cardiovascular and respiratory system diseases	5	10
	<b>Final Exam</b>		2

**Learning Outcomes**

Criteria	Competences
Knowledge and Understanding	At the end of this committee, students will gain knowledge on the basic pathologic mechanisms of cardiovascular and respiratory system disorders, gain knowledge on the physical Investigation, diagnosis and treatment of these disorders, will be aware about pharmacokinetic properties of drugs the medicines used for cardiovascular and respiratory system disorders treatment.
Applying knowledge	At the end of this block, students will be able to: <ul style="list-style-type: none"> <li>• Define the signs and symptoms, related risk factors, and pathogenesis of lung and respiratory tract disorders, define the diagnosis and principles of treatment of these disorders</li> <li>• Define the factors that impair the normal function of the cardiovascular system, pathology, diagnosis and treatment of hypertension, heart failure, congenital heart diseases, atherosclerotic heart disease, rhythm disorders, pericardial diseases and</li> </ul>

	<p>myocardial diseases</p> <ul style="list-style-type: none"> <li>• Define the pathology, epidemiology, diagnosis and treatment of tuberculosis, chronic obstructive and interstitial, environmental and occupational lung diseases.</li> </ul>
Communication skills	Will be able to communication with colleagues, have communication skills with the related specialist, able to prepare written reports.
Life-long learning ability	<p>Can fully use study resources in consequence, can manage one's own learning process. Understands the importance of life-long learning. Is an independent learner. Understands and specifics of the learning process. Is able to develop a successful strategic plan for learning.</p> <p>Student can search needed information in scientific sources and use this data in practice</p>