

**MED 5019–Cardiovascular Surgery**

Course Name	Code	Semester	Type of course	Theory (hours)	Group work (hours)	ECTS
Cardiovascular surgery	MED 5019	X	Elective	15	26	3
Faculty, the educational program and education level	Faculty of Medicine, one-cycle Educational Program “Medicine”					
Author (s)	<p><b>Ismet Dindar</b> –Professor, Doctor of Medicine Mob.tel.: 532 2 41 42 66; e-mail: <a href="mailto:ismetdindar@hotmail.com">ismetdindar@hotmail.com</a></p> <p><b>Ergun Demirsoy</b>- Assistant Professor Mob.tel.: 05334268308; e-mail: <a href="mailto:ergundemirsoy@hotmail.com">ergundemirsoy@hotmail.com</a></p> <p><b>Ioseb Sikharulidze</b> – invited teacher Mob.tel.: (995) 577137363; e-mail: <a href="mailto:iosebii@yahoo.com">iosebii@yahoo.com</a></p> <p><b>Marine Mishvelidze</b> – invited teacher Mob.tel.: 577 137420; e-mail: <a href="mailto:m.mishvelidze@gmail.com">m.mishvelidze@gmail.com</a></p> <p>Consultation day and time - individually</p>					
Educational course format	Lecture Group Work					
Educational course Loading	<p><b>Total:</b> 90 acad. hours <b>Contact hours:</b> 45 h, among them</p> <ol style="list-style-type: none"> <li>1. Lecture – 15 h</li> <li>2. Team work – 26h</li> <li>3. Midterms – 2 h</li> <li>4. Final exam -2 h</li> </ol> <p><b>Independent work</b> – 45 h</p>					
Prerequisites	MED 4004					
The purpose (s) of tutorial course/modules	Students will have an idea about surgical management of cardiovascular diseases that they may encounter in primary healthcare setting. Also they will learn how to diagnose and treat arterial and venous system disorders.					
Teaching and learning methods	<p><b>Lecture - Face-to-Face;</b> verbal contact, slides for the lecture will be provided</p> <p><b>Demonstration</b> –models, simulators, slides and other visual aids; Report preparation and presentation in group with the following discussion and analysis of it;</p> <p><b>Discussion</b> – questions and answers, answers analysis supported with practical facts;</p> <p><b>Analyses and synthesis</b> –detailed discussion of aimed problem, assessment of each others point of view;</p> <p>Also, in order to develop the <b>clinical skills</b> the following concrete practical work will be carried out under the supervision of the teacher-to collect anamnesis, examine the patient, take the patient history, duty hours;</p>					

	<p><b>Asking questions</b> – the students will be evaluated through oral checking of the current theoretical material by asking questions in the frames of the material already covered that will help to develop the skill of linking the covered and the current materials and make proper analysis;</p> <p><b>Project Preparation and Presentation</b> – a student shall choose a topic provided by or independently, find the needed material, work with books, develop the project plan and the expected outcome. The project is 10-page printed material and to be presented in PowerPoint format before the audience.</p>
<p><b>Assessment criteria</b></p>	<p>Student’s knowledge is assessed based on the 100-score system, out of which 60 scores are addressed to the mid-term evaluations, and 40 scores are allocated for the final exam.</p> <p><b>Mid-term assessment components:</b></p> <ul style="list-style-type: none"> <li>• Clinical skills- 10 scores;</li> <li>• Medical documentation processing - 10 scores;</li> <li>• Project preparation and presentation - 10 scores;</li> <li>• Duty - 10 scores;</li> <li>• <b>Mid-term exam</b> - 20 scores;</li> </ul> <p style="text-align: center;"><b>Assessment of clinical skills - max 10 scores</b></p> <ol style="list-style-type: none"> <li>1. Relevance of the main clinical skills and theoretical knowledge, surfing the additional information around the topic independently-1 score;</li> <li>2. Accurate consistency of performing manipulation-1 score;</li> <li>3. The skills of interpretation of clinical results-1 score;</li> <li>4. Patient and own security-1 score;</li> <li>5. Skills of communication with the patient-1 score;</li> <li>6. The skills of defending the principles of deontology and ethics-1 score;</li> <li>7. The skills of analytical thinking around the diagnosis. Carrying differential diagnosis. Projecting the relevant plan of treatment-1 score;</li> <li>8. The skills of quick orientation in the limited time period-1 score;</li> <li>9. The skills of management of the emergency help situation-1 score;</li> <li>10. The skills of receiving the informative consent from the patient and the procedure preparation- 1 score;</li> </ol> <p style="text-align: center;"><b>Evaluation of processing of the medical documentation-max. 10 scores</b></p> <ul style="list-style-type: none"> <li>• 9-10 scores-The task is understood and analysed correctly. Anamnesis is collected completely. The history is filled out consistently; all components in it are described in a detailed way with the correct terminology; examination plan is complete; diagnosis formulated correctly, the treatment diagram is adequate and includes the names of the medicines with the correct names and dosages.</li> <li>• 7-8 scores-The task is understood correctly, anamnesis collected, all components consistently presented and described with proper terminology, examination plan is complete, the diagnosis is formulated accurately, treatment plan is adequate, with accurately prescribed medicines.</li> <li>• 5-6 scores-the idea of the task is understood. Anamnesis is complete. The history contains all components, but is inconsistent with incorrect terminology. Examination plan is incomplete; the diagnosis is relevant to the clinical data, but is not completely</li> </ul>

	<p>formulated. Treatment scheme is adequate and includes the complete list of medicines;</p> <ul style="list-style-type: none"> <li>• 3-4 scores – the task is partially understood, the history components are incomplete and inconsistent; the diagnosis is in compliance with the symptom complex, but is not supported; treatment plan is adequate, medicine list incomplete;</li> <li>• 1-2 scores–the task is understood incorrectly. The history is presented within the scheme;</li> <li>• 0 score – the task is not fulfilled;</li> </ul> <p><b>Project Preparation and presentation - Grading criteria – Maximum 10 scores</b></p> <ol style="list-style-type: none"> <li>1.Actuality of the problem – 1 sc;</li> <li>2.Accurate planning – 1 sc;</li> <li>3.Review of the literature on the issue -1sc;</li> <li>4.Research methods relevance with the research goals – 1sc;</li> <li>5.Logical argumentation and correlation with the main theme – 1sc;</li> <li>6.Reference accuracy and correlation with the main source - 1sc;</li> <li>7.Culture of writing – 1sc;</li> <li>8.Language and style accuracy - 1sc;</li> <li>9.Visual and technical side of the material – 1sc;</li> <li>10.Culture of the discussion and listening to the opponent- 1 sc.</li> </ol> <p><b>Mid-term exam</b> - 20 scores;</p> <p>Mid-term exam is a test. The test is comprised of 40 questions each one rates 0.5 scores. The student is allowed to pass the final exam, if he accumulates not less than 11 points for the mid-term evaluations.</p> <p><b>Final exam - 40 scores</b></p> <p>Final exam is a combination of tests -30 scores (the test includes 60 closed questions, each one rates 0.5 scores) and the evaluation of clinical skills-max. 10 scores.</p> <p>The final exam is considered to be passed if the student accumulates at least <b>70% or more</b> out of the maximum assessment of the exam (40X70/100=28 scores).</p> <p>Credit will be awarded if the student accumulates at least 51 scores out of 100 scores;</p> <p><b>Positive assessments:</b></p> <ul style="list-style-type: none"> <li>• (A) Excellent - 91scores and more;</li> <li>• (B) Very good - 81-90scores;</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 assessments:</b></p> <ul style="list-style-type: none"> <li>• (FX) didn't pass - 41-50 scores that means that student needs more work and is allowed to pass one additional exam;</li> <li>• (F) Failed – 40 scores or less that means that the student did not perform enough and has to take the course again</li> </ul> <p>The student has the right to pass an examination in the same semester. The interval between the final and additional exams should not be less than 10 days.</p>
<b>The basic literature</b>	<ol style="list-style-type: none"> <li>1. <b>Cardiac Surgery</b>, Kirklin/Barratt-Boyes. 4th Edition, 2013;</li> <li>2. <b>Schwartz's Principles of Surgery</b> - F. Charles Brunicaardi, Ninth Edition. 2009. pp 777-798</li> </ol>
<b>The auxiliary literature</b>	<ol style="list-style-type: none"> <li>3. <b>Rutherford's Vascular Surgery</b>, 7th Edition, 2010;</li> <li>4. <b>Doty Cardiac Surgery: Operative Technique</b>, 2nd Edition, 2012</li> </ol>

**The tutorial/training course content**

<b>Nº</b>	<b>Subjects</b>	<b>Lecture (hour)</b>	<b>Work in group (hour)</b>
1	Rheumatic valve diseases and surgical management	2	4
2	Acyanotic congenital heart diseases and surgical management	2	3
3	Cyanotic congenital heart diseases and surgical management	2	3
4	Coronary artery diseases and surgical management	1	3
	<b>Midterm exam</b>		2
5	Diagnostic of aortic aneurysms, Surgical management of aortic aneurysms and dissections	2	3
6	Treatment of peripheral arterial diseases and acute arterial embolism	2	3
7	Treatment of varicoses, venous insufficiency and deep venous thrombosis	2	4
8	Cardiac Transplantation	2	3
	<b>Final Exam</b>		2

**Learning Outcomes**

<b>Criteria</b>	<b>Competences</b>
<b>Knowledge and Understanding</b>	After completion of the course the student will have a deep and thorough knowledge of surgery treatment of basic diseases of heart and blood vessels, about methods and techniques. will know the opportunity of the usage of angio-microsurgical methods in blood vessel surgery.
<b>Applying knowledge</b>	Student will be able: <ul style="list-style-type: none"> <li>• to practice emergency intervention in emergent vascular diseases and can refer to cardiovascular surgery department;</li> <li>• to diagnose and treat varicose and venous insufficiency in primary healthcare setting;</li> <li>• to render the first medical aid during blood vessel disease and trauma.</li> </ul>
<b>Communication Skills</b>	Student can manage the different form of academic and scientific information from different sources (classic and electronic library, the Internet) to work fast and look for the relevant information effectively. These found materials has to be planned, processed, analyzed, and to make the best use for the report with the proper conclusions as in in writing, as well as in verbal

form.

Student can working in group, has watching, listening, summarizing, asking and answering questions abilities, is able to participate in the discussion.

. He/she will be able to give the explanations to the patient, to agree the plan of treatment with the patient, to give him/her the information on the dangers and benefits of surgical or conservative treatment, to assist in receiving the decision, write down medical documentation correctly.