

GENERAL INFORMATION		
Course name	Surgery 2 – Cardiac Surgery	
Course director	Assoc. Prof. Goran Kondža, MD, PhD	
Assistants	Asst. Prof. Igor Alfirević, MD, PhD Asst. Prof. Krunoslav Šego, MD, PhD	
Study program	Integrated undergraduate and graduate university study program Medical Studies in German	
Course status	Mandatory	
Year of study, semester	4 th year, 8 th semester	
Credits allocated and form of instruction	ECTS student workload	2
	Number of teaching hours (L+S+E)	30 (10+10+10)
COURSE DESCRIPTION		
Course objectives		
Acquaint students with indications for cardiac surgery, surgical techniques and preoperative assessments of surgical risk of cardiac surgery, the role of a cardiac surgeon in a cardiac team, preoperative and postoperative complications and their treatment, trends and future of cardiac surgery.		
Course requirements		
There are no specific requirements for this course except those defined in the study program curriculum.		
Learning outcomes relevant to the study program		
1.1, 3.5		
Expected learning outcomes (5-10 learning outcomes)		
Knowledge		
<ol style="list-style-type: none"> 1. Identify an indication for performing cardiac surgery; 2. Present differential-diagnostic possibilities based on clinical symptoms and signs of disease; 3. Identify the basic principles of treatment and map out the most appropriate type and sequence of therapeutic interventions; 4. Critically evaluate various invasive and non-invasive treatment methods of specific diseases and provide arguments to the patient; 5. Predict the appropriate prognosis of a disease and analyze the course, effects and outcomes of medical treatment; 6. Recognize diagnostic and treatment methods in accordance with the principles of “evidence-based medicine”. 		
Skills		
<ol style="list-style-type: none"> 1. Demonstrate the ability to independently take a medical history, perform a clinical examination of the gastrointestinal system and determine a working diagnosis; 2. Identify the leading symptoms of gastrointestinal diseases and identify the correlation between these symptoms and specific clinical entities; 3. Recognize the symptoms of a life-threatening condition in a patient and present how to provide care for them; 4. Become proficient in discussing the clinical picture and interpreting the differential diagnosis; 5. Become proficient in interpreting and discussing the patients' diagnostic findings; 6. Carry out certain clinical skills independently in accordance with the Clinical Skills Handbook; 		

7. Under supervision, complete different diagnostic and therapeutic procedures as outlined in the Clinical Skills Handbook;
8. Demonstrate the means for managing diagnostic and therapeutic procedures and monitoring patients in accordance with appropriate procedures (algorithms);
9. Keep patients' medical records;
10. Participate in team, interdisciplinary and multidisciplinary clinical work and demonstrate good communication skills with the patients, their companions and staff;
11. Cooperate effectively with a cardiac surgeon and provide him/her with the necessary information for cardiac surgery;
12. Effectively monitor and provide care for cardiac surgery patients.

Course content

Preoperative preparation and surgical risk assessment;
 Indications for surgical treatment of patients with coronary diseases;
 Indications for surgical treatment of patients with heart valve diseases;
 Indications for surgical treatment of patients with aortic conditions and peripheral vascular problems;
 Minimally invasive surgery;
 Robot-assisted cardiac surgery.

Form of instruction	<input checked="" type="checkbox"/> lectures	<input type="checkbox"/> individual assignments
	<input checked="" type="checkbox"/> seminars and workshops	<input type="checkbox"/> multimedia and Internet
	<input checked="" type="checkbox"/> exercises	<input type="checkbox"/> laboratory
	<input type="checkbox"/> distance learning	<input type="checkbox"/> mentoring activities
	<input type="checkbox"/> field course	<input type="checkbox"/> other

Student obligations

Come to class prepared by studying the recommended literature for each unit and actively participate in all forms of instruction. The student must participate in at least 70% of classes to pass the course.

Monitoring student learning

Attendance	x	Active participation	x	Seminar paper		Experimental work	
Written exam	x	Oral exam	x	Essay		Research	
Project		Continuous assessment		Paper		Practical work	
Portfolio							

Assessment and evaluation of students during class and on the final exam

Students' performance will be evaluated during class and on the final exam. Students are evaluated numerically and descriptively (insufficient (1), sufficient (2), good (3), very good (4), excellent (5)). During classes, a student can earn a maximum of 100 points. Students can earn a maximum of 20 points during classes through different types of activities. On the final exam, students can earn a maximum of 80 points. The final grade represents the sum of the points earned during classes and on the final exam.

Mandatory reading

1. Siewert R, Stein H. Chirurgie. Springer; 2012

Additional reading

1. Mann DL, Zipes DP, Libby P, Bonow RO. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. Saunders; 2014
2. Mirat J, Ćorić V et al.: Bolesti srčanih zalistaka [Heart Valve Diseases], Globus; 2012

The number of copies of mandatory reading in proportion to the number of students currently taking this course

Title	Number of copies	Number of students
A purchased license for online textbooks shall be used https://bfdproxy48.bfd-online.de/login.htm?back=http%3a%2f%2fpartner.bfd-online.info.bfdproxy48.bfd-online.de%2fameos%2fbfdAboGateway%3fabold%3d264117		
Access will be granted to all students enrolled in the study program		

Quality monitoring methods ensuring the acquisition of knowledge upon completion, skills and competences

The quality of course performance is monitored through an anonymous student survey on the quality of the organization and conduction of classes, the course content and the work of professors. The usefulness of the lectures from the students' perspective, the curriculum content, the professor preparedness, the clarity of the presentation, the amount of new content and the quality of the presentation are evaluated. The curriculum and its execution are administratively compared. The participation of students in lectures and exercises, as well as the excuses for missing classes, are controlled and analyzed.