

GENERAL INFORMATION		
Course name	Sports Cardiology	
Course director	Prof. Jure Mirat, MD, PhD	
Assistants	Prof. Kristina Selthofer-Relatić, MD, PhD Assoc. Prof. Goran Krstačić, MD, PhD	
Study program	Integrated undergraduate and graduate university study program Medical Studies in German	
Course status	Elective	
Year of study, semester	4 th year, 8 th semester	
Credits allocated and form of instruction	ECTS student workload	1
	Number of teaching hours (L+S+E)	15 (5+5+5)
COURSE DESCRIPTION		
Course objectives		
Define the concept of an athlete's heart in anatomical and electrophysiological aspects and abnormal reactions to different forms of physical stress. Define pathological entities associated with the risk of sudden death in athletes and diagnostic and therapeutic protocols in their identification and treatment.		
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		
1.2., 2.1., 2.3., 4.2.		
Expected learning outcomes (5-10 learning outcomes)		
<ol style="list-style-type: none"> 1. Differentiating between different anatomical and electrophysiological variations of an athlete's heart. 2. Define risk factors for sudden cardiac death. 3. Assess the risk of sudden cardiac death. 4. Pharmacological possibilities in preventing sudden cardiac death. 5. Non-pharmacological possibilities in preventing sudden cardiac death. 		
Course content		
<ol style="list-style-type: none"> 1. Physiology of cardiovascular system under load 2. Anatomical and electrophysiological heart remodeling to physical stress 3. Hypertrophic cardiomyopathy 4. Arrhythmogenic right ventricular dysplasia 5. Prolonged QT interval in different variants 6. Brugada syndrome 7. Coronary disease and sport 8. Heart valve diseases and sports 9. Arrhythmias and sport 10. Cardiac societies' guidelines for sport 		
Form of instruction	<input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> exercises <input type="checkbox"/> distance learning <input type="checkbox"/> field course	<input type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and internet <input type="checkbox"/> laboratory <input type="checkbox"/> mentoring activities <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	x
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. Niebauer J. Sportkardiologie. Springer Berlin Heidelberg; 2015

Additional reading

1. Corrado D, Pelliccia A et al. Cardiovascular pre-participation screening of young competitive athletes for prevention of sudden death: proposal for common European protocol. Consensus Statement of the Study of Sport Cardiology of the Working Group of Cardiac Rehabilitation and Exercise Physiology and the Working Group of Myocardial and Pericardial Disease of the European Society of Cardiology. European Heart Journal 205;26:516-524.
2. Paolo Zeppilli P. Cardiologia dello Sport. Casa editrice scientifica internazionale.
3. Zipes Jalife Z. Cardiac Electrophysiology. From Cell to bedside. Saunders.
4. Mirat J, Ćorić V. Bolesti srčanih zalistaka [Heart Valve Diseases]. Naknadni zavod Globus. 2011

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

<i>Title</i>	<i>Number of copies</i>	<i>Number of students</i>
Niebauer J. Sportkardiologie. Springer Berlin Heidelberg; 2015	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.