

Study program: Doctoral Academic Studies in Biomedical Sciences		
Course title: CURRENT ISSUES IN CARDIOLOGY		
Teacher: Anastazija Đ. Stojšić-Milosavljević, Milovan S. Petrović, Dejan B. Sakač, Vladimir M. Ivanović, Igor Đ. Ivanov, Dragan V. Kovačević, Nada B. Čemerlić-Ađić, Aleksandra A. Ilić		
Course status: elective		
ECTS Credits: 20		
Condition: -		
The aim of course: The aim of the study program "Current Issues in Cardiology" is to acquire the most modern knowledge and achievements in the scientific field of cardiology. Modern cardiology is a multidisciplinary field and includes several modern diagnostic procedures of interventional and emergency cardiology, rhythmology, as well as various imaging methods (echocardiography, intravascular ultrasound, etc.), all with the aim of modern diagnosis and treatment of current cardiac diseases, such as ischemic heart disease, heart failure, valvular and structural heart diseases, etc. Participants will be trained to adopt the most current knowledge, acquire skills in this field and master the methodology of scientific research, to successfully and critically implement them in their future original scientific research and PhD thesis, which will contribute to the development of the academic and professional community.		
Expected outcome of the course: Participants will be introduced to the latest scientific knowledge and achievements in the field of cardiology, through a multidisciplinary approach to the most current topics of modern cardiology. Participants will be able to independently and successfully analyze and interpret the latest scientific achievements in the field of cardiology, to master the methodology of scientific research, as well as to open new dilemmas in this field through a critical and innovative approach, which will be a contribution to the development of the academic and professional community. By independent and active use of acquired knowledge and skills from the mentioned scientific field, as well as the adopted methodology of scientific work during the entire doctoral studies, participants will be able to realize original scientific research, which will be the basis of the PhD thesis.		
Course description <i>Theoretical education</i>		
<ol style="list-style-type: none"> 1. Intravascular ultrasound 2. Advanced imaging methods: "2d" and "3d strain" 3. Three-dimensional echocardiography 4. New aspects in the diagnosis and treatment of heart failure 5. Modern echocardiography: transpulmonary contrast 6. Cardiovascular diseases in pregnancy 7. Innovation in emergency cardiology: mechanical circulatory support 8. Invasive functional assessment of coronary heart disease 9. New interventional methods in the treatment of valvular heart disease 10. Significance of comorbidities in the selection of optimal cardiovascular pharmacotherapy 11. Digitization and telemedicine in cardiology 12. Actualities in rhythmology 13. Echocardiography in modern interventional procedures 14. Cardiomyopathies: a modern approach in diagnosis and treatment 15. Actualities in interventional cardiology 		
Literature <i>Mandatory</i>		
<ol style="list-style-type: none"> 1. Douglas P. Zipes, Peter Libby, Robert O. Bonow, Douglas L. Mann, and Gordon F. Tomaselli. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. Single Volume, 11th ed. Elsevier; 2019. 2. John Camm, Thomas F. Luscher, and Patrick W. Serruys. The ESC Textbook of Cardiovascular medicine. 3th ed. Oxford: Oxford University Press; 2018. 3. Jameson JL, Fauci A, Kasper D, Hauser S, Longo D, Loscalzo J. Harrison's Principles of Internal Medicine. 20th ed. New York: McGraw-Hill; 2018. 		
<i>Additional (recommended by the mentor)</i>		
Number of active classes	Theory: 60	Practices: 45
Teaching methods:		

Mentoring, lectures, consultations, debates, discussions and essays

Student activity assessment (maximally 100 points)

lectures: 30

essay: 15

written exam: 55