

Study program: Doctoral Academic Studies in Biomedical Sciences		
Course title: ENDOCRINOLOGY		
Teacher: Đorđe S. Popović, Milica K. Medić-Stojanoska, Ivana A. Bajkin, Tijana S. Ičin, Viktor E. Til, Duško B. Kozić, Velibor S. Čabarkapa, Katarina M. Koprivšek, Olivera R. Nikolić, Branislava P. Ilinčić		
Course status: elective		
ECTS Credits: 20		
Condition: -		
The aim of course: The aim of the study program "Endocrinology" is to acquire knowledge from the scientific field of endocrinology, but also from the other fields of medicine which represent an inseparable part of the multidisciplinary scientific approach in the field of endocrinology, such as pathophysiology, radiology, nuclear medicine, etc. In addition to acquiring knowledge, participants will be trained to successfully adopt, evaluate and critically analyze innovations, ideas and aspirations in modern endocrinology, with the aim of enabling them to contribute to the development of the academic and professional community through their own research work. Finally, the aim of the study course is also to facilitate the realization of participants' research activities that will be the basis for their PhD thesis through the acquired knowledge and skills, along with the methodology of scientific work obtained during the entire doctoral academic studies.		
Expected outcome of the course: Participants will be acquainted with current scientific achievements in the field of endocrinology and will be enabled to successfully adopt, evaluate and critically analyze innovations, ideas and aspirations in this scientific field, with special reference to the correct interpretation of scientific content that carries open and unresolved scientific issues, which will be an excellent basis for their contribution to the development of the academic and professional community through their own innovative scientific research. In this way, through the acquired knowledge and skills, and with the methodology of scientific work adopted during the entire doctoral academic studies, the realization of participants' research activities that will be the basis for their PhD thesis will be facilitated.		
Course description <i>Theoretical education</i> 1. Modern laboratory and imaging tools in diagnostics of endocrine diseases 2. Advanced imaging methods in neuroendocrinology 3. Neuroimaging of the orbit and optic nerves in endocrine diseases 4. Hyperprolactinemia and metabolic syndrome 5. Ultrasonography of thyroid gland 6. New aspects of adrenal dysfunction 7. Imaging diagnostics of adrenal dysfunction 8. Calcium homeostasis 9. Primary hypoparathyroidism 10. Autoimmune polyglandular syndromes 11. Endocrine disruptors 12. Modern approach to pharmacologic treatment of type 2 diabetes 13. Innovative technologies in diabetology 14. Biomarkers for cardiometabolic risk assessment in obesity 15. Lipocrinology: the relationship between lipid metabolism and endocrine function		
Literature <i>Mandatory</i> 1. Melmed S, Koenig R, Rosen C, Auchus R, Goldfine A. Williams Textbook of Endocrinology. 14th ed. Amsterdam: Elsevier; 2019. 2. Holt RIG, Cockram C, Flyvbjerg A, Goldstein BJ. Textbook of Diabetes. 5th ed. New Jersey: Wiley-Blackwell; 2017. 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</i> recommended by the lecturer		
Number of active classes	Theory: 60	Practices: 45
Teaching methods: Mentoring, lectures, consultations, debates, discussions and essays		

Student activity assessment (maximally 100 points)

activities during lectures: 30

essay: 15

written exam: 55