

Program of study: General Medicine
Course: Clinical Biochemistry
Abbreviation: LCH/VA031
Schedule: 21 hours of tutorials
Course distribution: 5th year, 9th semester, 10th semester
Number of credits: 2
Course form: Tutorials

Tutorials A:

Teachers: Doc. MUDr. Josef Bartek, CSc.
Study: Block
Block date: 7.–10. 12. 2020 (7.–9. 12. 2020 14:00–18:30, 10. 12. 2020 14:00–16:15), seminar classroom, or
 19.–22. 4. 2021 (19.–21. 4. 2021 14:00–18:30, 22. 4. 2021 14:00–16:15), seminar classroom

	Block day	Subject	No. of less.	Teacher
1	7. 12. 2020 or 19. 4. 2021	Disorders of internal milieu. Acido-base equilibrium. Water metabolism and electrolytes. Therapeutical calculations. Case histories. Infusion therapy. Nutritional assesment. Nutritional support. Parenteral nutrition. Case histories. Intensive therapy of diabetic patients. Biochemical examination of a diabetic patient. Diagnosis and monitoring of diabetes mellitus. Diabetic ketoacidosis. Case histories. Biochemical diagnosis of myocardial infarction. Case histories. Diseases of liver and biliary duct, clinical biochemistry of the pancreas and digestive tract. Case histories.	4	Bartek
2	8. 12. 2020 or 20. 4. 2021	Diseases of the kidney and urinary tract. Investigation of renal function. Case histories. Urolithiasis. Differential diagnosis. Metaphylaxis. Case histories. Osteoporosis. Laboratory diagnosis, therapy monitoring. Case histories. Hyperuricaemia. Case histories.	4	Bartek

3	9. 12. 2020 or 21. 4. 2021	Lipoprotein metabolism and clinical disorders. Metabolic cardiovascular syndrome. Atherosclerosis. Global risk. Case histories. Deficiency of selected metals (K, Na, Fe, Cu, Mg, Ca, Zn, Se). Diagnosis and therapy. Case histories.	4	Bartek
4	10. 12. 2020 or 22. 4. 2021	Endocrinology. Case histories. Parenteral therapy.	2	Bartek

Tutorials B:

Teachers: Doc. MUDr. Josef Bartek, CSc.
Study: Block
Block date: 7.–10. 12. 2020 (7.–9. 12. 2020 14:00–18:30, 10. 12. 2020 14:00–16:15), seminar classroom, or
19.–22. 4. 2021 (19.–21. 4. 2021 14:00–18:30, 22. 4. 2021 14:00–16:15), seminar classroom

	Block day	Subject	No. of less.	Teacher
1	7. 12. 2020 or 19. 4. 2021	Metabolic acid-base disorders. Case histories. Mineral disorders (Na, K, Cl, Ca, Mg). Case histories.	1.5	Bartek
2	8. 12. 2020 or 20. 4. 2021	Myocardial infarction. Biochemical markers of cardiac muscle damage. Case histories.	1.5	Bartek
3	9. 12. 2020 or 21. 4. 2021	Management of hyperlipidaemia. Etiology and management of atherosclerosis. Global risk. Case histories.	2.0	Bartek
4	10. 12. 2020 or 22. 4. 2021	Management of osteoporosis, urolithiasis and arthritis uratica. Case histories.	2.0	Bartek

Completed by: Course unit credit, examination
Requirements: 100 % attendance in seminars
Literature: Gaw, A. (1996). *Clinical biochemistry*. London: Churchill Livingstone. ISBN 0-443-04481-3
Myers, T. (2011). *Mosbys diagnostic and laboratory test reference* (10th ed.). St.Louis, Missouri: Elsevier Mosby. ISBN 978-0-323-07405-6
Sauna, C. A. (2003). *Clinical Chemistry: Concepts and applications*. New York, NY: McGraw-Hill. ISBN 0-07-136047-6
Nessar, A. (2011). *Clinical Biochemistry*. Oxford: Oxford university press. ISBN 978-0-19-953393-0