

MEDICAL BIOCHEMISTRY 2 2nd COURSE Academic year 2025/2026 (Summer semester) SEMINARS AND LABORATORY PRACTICALS		
WEEK	DATE	TOPIC
1.	16. 02. – 19. 02. 2026	Seminar: Metabolisms of nucleotides, regulation, metabolic disorders. Antimetabolites and their medical utilization. (5-question test) Laboratory practical: Determination of uric acid in serum.
2.	23. 02. – 26. 02. 2026	Seminar: Metabolism of proteins and amino nitrogen, metabolism of glutamine, urea cycle. (5-question test) Laboratory practical: Determination of urea in serum.
3.	02. 03. – 05. 03. 2026	Seminar: Metabolism of individual amino acids, disorders. (5-question test) Laboratory practical: Determination of creatinine in serum.
4.	09. 03. – 12. 03. 2026	Seminar: Metabolism of haem. Hyperbilirubinemias. Xenobiochemistry and metabolism of ethanol. (5-question test) Laboratory practical: Determination of bilirubin in serum.
5.	16. 03. – 19. 03. 2026	Seminar: Integration of metabolism of saccharides, lipids, and proteins in tissues and organs in absorptive state, postabsorptive state and fasting. (5-question test)
6.	23. 03. – 26. 03. 2026	Seminar: Metabolic interrelationships during fasting, stress, pregnancy, and exercise. (5-question test)
7.	30. 03. – 02. 04. 2026	Laboratory practical: Determination of gamma-glutamyl transferase activity in serum
8.	06. 04. – 09. 04. 2026	Laboratory practical: Determination of gamma-glutamyl transferase activity in serum
9.	13. 04. – 16. 04. 2026	Seminar: Acid-base homeostasis, buffering systems, and regulatory mechanisms of the kidneys, lungs, and blood. Laboratory practical: General calculations in biochemistry.
10.	20. 04. – 23. 04. 2026	Seminar: The role of reactive oxygen species in various pathological cognitions. (5-question test) Laboratory practical: Determination of ascorbic acid by iodometric titration.
11.	27. 04. – 30. 04. 2026	Seminar: Homeostasis of the internal environment – hormonal and ionic regulatory mechanisms. (5-question test) Laboratory practical: Determination of alkaline phosphatase activity in serum.
12.	04. 05. – 07. 05. 2026	Seminar: Clinical biochemistry of biological fluids: from sample collection to interpretation of results. Department of clinical biochemistry of University Hospital Martin.
13.	11. 05. – 14. 05. 2026	Credit test – 1 st retake of 2 nd credit test; 2 nd retake of 1 st credit test; compensatory seminars and laboratory practicals, compensatory 20 question test
14.	18. 05. – 21. 05. 2026	Credit test – 2 nd retake of 2 nd credit test; compensatory seminars and laboratory practicals, compensatory 20 question test