

Apporoved
Vice-Chancellor for Academic Affair
Prof. J.Guminsky
31.08.2017 _____

THE CALENDAR-THEME SCHEDULE OF LECTURES
to biochemistry for 3d year students of the pharmaceutical faculty (clinical
pharmacist) on the V (autumn) semester (2017-2018 academic years)

| № | Date | Theme of lecture | Lecturer | Time (h) |
|----------|-------------|--|---------------------------------|-----------------|
| 1 | 11-15.09 | Clinical biochemistry as sciences. Clinical enzymology. | Associate prof. O.I. Shtatko | 2 |
| 2 | 25-29.09 | Biochemical aspects of carbohydrate metabolism disorders. Clinical and biochemical characteristics of diabetes mellitus. | Associate prof. O.I. Shtatko | 2 |
| 3 | 9-13.10 | Biochemistry of blood in normal and pathological conditions. The main protein fractions. Acute phase proteins. Abnormal proteins. Rest nitrogen, its composition and changes in pathological conditions. | Associate prof. O.I. Shtatko | 2 |
| 4 | 23-27.10 | Imbalances of lipids metabolism: atherosclerosis, dislipoproteinemias. Metabolic syndrome. Risk factors for cardiovascular diseases, investigation of lipids metabolism. | Associate prof. O.I. Shtatko | 2 |
| | | | Total | 8 |

Head of Biochemistry
Department

Prof. Zaichko N.V.

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THE CALENDAR-THEME SCHEDULE OF LABORATORY LESSONS
to biochemistry for 3^d year students of the pharmaceutical faculty (clinical pharmacist) on
the V (autumn) semester (2017-2018 academic years)

| № | Date | Theme of laboratory lesson | Time (h) |
|----------|-------------|---|-----------------|
| 1. | 4-8.09. | Subject and problems of clinical biochemistry. Basic concepts of enzymology. Properties of enzymes. | 2 |
| 2. | 11-15.09 | Activators and inhibitors of enzymes, its roles as drugs. Influence of activators and inhibitors on amylase activity. | 2 |
| 3. | 18-22.09 | Directions of clinical enzymology. Enzymodiagnosics. Quantitative determination of alkaline phosphatase activity in blood serum. | 2 |
| 4. | 25-29.09 | Enzymopathies. Enzymotherapy. Determination of phenyl pyruvate and homogentisinic acid in urine. | 2 |
| 5. | 2-6.10 | Proteins of blood serum in normal and pathological conditions. Quantitative determination of total protein and its fractions in blood serum. | 2 |
| 6. | 9-13.10 | Rest nitrogen system. Determination of uric acid in urine. | 2 |
| 7. | 16-20.10 | Biochemical aspects of carbohydrates metabolism disorders. Quantitative determination of glucose by glucose oxidase method. | 2 |
| 8. | 23-27.10 | Pathochemistry of carbohydrates metabolism. Diabetes mellitus, its complications. Influence of adrenalin and insulin on glucose levels in blood. Quantitative determination of ketone bodies in urine. | 2 |
| 9. | 30.10–3.11 | Clinico-biochemical characteristics of dislipoproteinemias and atherosclerosis. Quantitative determination of cholesterol in blood serum. | 2 |
| 10. | 6-10.11 | Clinico-biochemical characteristics of obesity, metabolic syndrome, fatty liver and gallstone disease. Lipid peroxidation in pathogenesis of its development. Determination of lipid peroxidation products. | 2 |
| 11. | 13-17.11 | Water-mineral metabolism imbalance. Quantitative determination of chlorides in blood plasma. | 2 |
| 12. | 20-24.11 | Biochemistry of inflammation. Definition of C-reactive protein in blood serum. | 2 |
| 13. | 27.11–1.12 | Biochemical diagnostics of GIT pathologies. Pathochemical processes in the stomach. Determination of stomach juice acidity. | 2 |
| 14. | 4-8.12 | Biochemical diagnostics of pancreas excretory dysfunctions. Quantitative determination of α - amylase activity in blood serum. | 2 |
| 15. | 11-15.12 | Clinico-biochemical characteristics of liver functions and its disorders. Quantitative determination of ALT activity in blood serum. | 2 |
| 16. | 18-22.12 | Clinico-biochemical indices and laboratory diagnostics of liver diseases. Quantitative determination of total bilirubin and its factions in blood serum. | 2 |
| | | Total | 32 |

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