Biochemistry

Week	Lesson	Subject	Lecturer
1. Week*	1. lesson	Enzymes; Structure of enzymes; Enzyme kinetics; Enzyme inhibitors and activators; Factors affecting enzymes; The importance of enzymes in pharmacy	Prof. Dr. Pınar Aksoy Sağırlı
	2. lesson	Classification of enzymes	Prof. Dr. Pınar Aksoy Sağırlı
2. Week*	1. lesson	Metabolism reactions in the human organism (Hydrolysis, condensation, oxidoreduction, transphosphorylation, transamination, transacylation, transmethylation, carboxylation, decarboxylation)	Doç. Dr. Özlem Kurt Şirin
	2. lesson	Metabolism reactions in the human organism (Xenobiotic metabolism)	Doç. Dr. Özlem Kurt Şirin
3. Week*	1. lesson	Carbohydrates; Structure of carbohydrates (Monosaccharides, Oligosaccharides, Polysaccharides)	Prof. Dr. Pınar Aksoy Sağırlı
	2. lesson	Carbohydrates; Structure of carbohydrates (Monosaccharides, Oligosaccharides, Polysaccharides)	Prof. Dr. Pınar Aksoy Sağırlı
4. Week *	1. lesson	Carbohydrate metabolism (Digestion and absorption of carbohydrates, Glycolysis, Gluconeogenesis)	Prof. Dr. Pınar Aksoy Sağırlı
	2. lesson	Carbohydrate metabolism (Citric acid cycle, Pentose Phosphate Pathway, Glycogenesis, Glycogenolysis)	Prof. Dr. Pınar Aksoy Sağırlı
5. Week *	1. lesson	Lipids; Structure of lipids (Fatty acids, Triacylglycerols, Phospholipids, Glycolipids, Isoprene derived lipids)	Dr. Tuğba Yılmaz Özden
	2. lesson	Lipids; Structure of lipids (Fatty acids, Triacylglycerols, Phospholipids, Glycolipids, Isoprene derived lipids)	Dr. Tuğba Yılmaz Özden
6. Week *	1. lesson	Lipid metabolism (Digestion and absorption of lipids, Lipoproteins, Fatty acids, and Cholesterol metabolism, Triacylglycerol synthesis)	Dr. Tuğba Yılmaz Özden
	2. lesson	Lipid metabolism (Digestion and absorption of lipids, Lipoproteins, Fatty acids, and Cholesterol metabolism, Triacylglycerol synthesis)	Dr. Tuğba Yılmaz Özden
7. Week *	1. lesson	Proteins; Structure of proteins (Classification of amino acids, Properties of amino acids, Three-dimensional structures of proteins, Classification of proteins)	Doç. Dr. Özlem Kurt Şirin
	2. lesson	Proteins; Structure of proteins (Classification of amino acids, Properties of amino acids, Three-dimensional structures of proteins, Classification of proteins)	Doç. Dr. Özlem Kurt Şirin
Midterm			
8. Week *	1. lesson	Protein metabolism (Digestion and absorption of proteins, Common metabolic pathways of amino acids, specific metabolic reactions of amino acids)	Doç. Dr. Özlem Kurt Şirin
	2. lesson	Nucleoproteins and nucleic acids; Structure of nucleic acids	Doç. Dr. Özlem Kurt Şirin
9. Week *	1. lesson	Nucleoprotein metabolism; Synthesis and degradation of nucleotides	Doç. Dr. Özlem Kurt Şirin
	2. lesson	Porphyrins and their compounds; Hemoglobin structure	Prof. Dr. Tuğba Yılmaz Özden
10. Week*	1. lesson	Porphyrins and their compounds; Hem synthesis and degradation; Porphyrias	Prof. Dr. Tuğba Yılmaz Özden
	2. lesson	Hormones; Classification of hormones. General mechanisms of action of hormones. Hypothalamic hormones. Pituitary hormones. Hormones that regulate calcium metabolism.	Prof. Dr. Pınar Aksoy Sağırlı
11. Week*	1. lesson	Hormones; Classification of hormones. General mechanisms of action of hormones. Hypothalamic hormones. Pituitary hormones. Hormones that regulate calcium metabolism	Prof. Dr. Pınar Aksoy Sağırlı
	2. lesson	Pancreatic hormones; Gastrointestinal system hormones; Adrenal medulla hormones; Thyroid hormones; Steroid hormones (adrenal cortex hormones, sex hormones); Pineal gland hormone; Locally acting hormones	Prof. Dr. Pınar Aksoy Sağırlı
12. Week*	**Kurban Bayramı**		

13. Week*	1. lesson	Acid-base balance of the organism	Dr. Öğr. Üyesi Gözde Hasbal Çelikok
	2. lesson	Water and inorganic substances	Dr. Öğr. Üyesi Gözde Hasbal Çelikok
14. Week*	1. lesson	Vitamins; Fat-soluble vitamins	Dr. Öğr. Üyesi Gözde Hasbal Çelikok
	2. lesson	Vitamins; Water-soluble vitamins	Dr. Öğr. Üyesi Gözde Hasbal Çelikok

Duration of lecture: 40 minutes