VSLC011s

SEMINARY CLASSES

Week 1	Date 17. 9. – 20. 9. 2007	The properties of single particles, mole and molar quantities; concentration of solutions, basic laboratory calculations.		
2	24. 9. – 27. 9. 2007	1 st test (Basic laboratory calculations.)		
	2007	Dissociation of electrolytes, activity of ions, ionic strength; osmotic pressure, osmolality.		
3	1. 10. – 4. 10. 2007	Protolytic reactions – pH of acid, base, and salt solutions, buffers, calculations.		
4	8. 10. – 11. 10. 2007	Intermolecular forces and adsorption. Tensides.		
5	15. 10. – 18. 10. 2007	2^{nd} test (Electrolytes, calculations of pH, hydrolysis of salts, buffers, osmotic pressure, intermolecular forces, tensides)		
6	22. 10. – 25. 10 2007	Reaction kinetics, the law of chemical equilibrium. Energy in chemical reactions, free energy and equilibrium, relationship between standard free energy change and equilibrium constant. Latin nomenclature.		
7	29. 10. – 1. 11. 2007	$\underline{3^{rd} test}$ (Reaction kinetics, thermodynamics of chemical change, latine nomenclature)		
		Oxidation-reduction reactions, electrode potentials, electrochemical cell potentials and the free energy change.		
8	5. 11. – 8. 11. 2007	Chemical properties of characteristic groups of carbon compounds – Part I.		
9	12. 11. – 15. 11. 2007	Chemical properties of characteristic groups of carbon compounds – Part II.		
10	19. 11. – 22. 11. 2007	$\underline{4^{\text{th}} \text{ test}}$ (Oxidation-reduction, organic compounds – nomenclature, structures, reactions.)		
		Heterocyclic compounds and their derivatives.		
11	26. 11. – 29. 11. 2007	Chemistry of saccharides.		
12	3. 12. – 6. 12. 2007	5 th test (Heterocycles, saccharides.)		
		Chemistry of lipids and steroids.		
13	10. 12. – 13. 12. 2007	Properties of amino acids. Proteins – secondary and tertiary structures.		
14	17. 12. – 20. 12. 2007	Summary test.		
15	2. 1. – 4. 1. 2008	Consultations. Credits.		

Recommende textbooks: Medical Chemistry – Seminar (J.Dostal, Brno 2007) Táborská, Sláma: Medical Chemistry I (General and Inorganic Chemistry) Brno 2006 Dostál: Medical Chemistry II (Organic Chemistry) Brno 2006