## SEMINARY CLASSES

Students are expected to come to the seminary room at least 5 minutes before the start of the lesson.

Attendance in seminars is obligatory. All absences must be justified through the Department of study affairs. Illness or other serious reason are usually the only acceptable excuse for absence from class and must be officially confirmed. After being absent the student must make up for the study materials from the given seminar according to the teachers instructions. Absences that are not officially apologized will be not allowed to make up!!!

Week 1	Date 15. 9. – 19. 9.	The properties of single particles, mole and molar quantities; concentration of solutions, basic laboratory calculations.
2	22. 9. – 26. 9.	<u>1<sup>st</sup> test</u> (Basic laboratory calculations.)
		Dissociation of electrolytes, activity of ions, ionic strength; osmotic pressure, osmolality.
3	29. 9. – 3. 10.	Protolytic reactions – pH of acid, base, and salt solutions, buffers, calculations.
4	6. 10. – 10. 10.	Intermolecular forces and adsorption. Tensides.
5	13. 10. – 17.10.	<u><b>2</b><sup>nd</sup> test</u> (Electrolytes, calculations of pH, hydrolysis of salts, buffers, osmotic pressure, intermolecular forces, tensides)
		Reaction kinetics, the law of chemical equilibrium.
6	20. 10. – 24. 10	Energy in chemical reactions, free energy and equilibrium, relationship between standard free energy change and equilibrium constant. Latin nomenclature.
7	27. 10. – 31.10.	<u><b>3<sup>rd</sup> test</b></u> (Reaction kinetics, thermodynamics of chemical change, latine nomenclature )
		Oxidation-reduction reactions, electrode potentials, electrochemical cell potentials and the free energy change.
8	3. 11. – 7. 11.	Chemical properties of characteristic groups of carbon compounds – Part I.
9	10. 11. – 14.11.	Chemical properties of characteristic groups of carbon compounds – Part II.
10	18. 11. – 21.11.	<u><b>4</b></u> <sup>th</sup> test (Oxidation-reduction, organic compounds – nomenclature, structures, reactions.)
		Heterocyclic compounds and their derivatives.
11	24. 11. – 28.11.	Chemistry of saccharides.
12	1. 12. – 5. 12.	<u>5<sup>th</sup> test</u> (Heterocycles, saccharides.)
		Chemistry of lipids and steroids.
13	8. 12. – 12. 12.	Properties of amino acids. Proteins – secondary and tertiary structures.
14	15. 12. – 19.12.	Summary test.

<u>Recommende textbooks</u>: Medical Chemistry – Seminar (J.Dostal, Brno 2008) Táborská, Sláma: Medical Chemistry I (General and Inorganic Chemistry) Brno 2006 Dostál: Medical Chemistry II (Organic Chemistry) Brno 2006

Compensatory dates for neglected lessons (justified properly) will be given only by agreement with the respective teacher.

The 31<sup>st</sup> of January 2009 is the deadline for making up all the lessons!

## Conditions for giving the course-unit credit

First condition is full attendance in all lessons (or making up all missing and justified lessons). Five short tests are written during the semester. The total number of questions in all tests is 64, each correct answer is counted as one point. Students that will obtain 49 points or more during the semester are not obliged to write the credit test.

The other students will write the credit test with the 30 questions in the last week of the semester. The limit for passing the credit test is 12 points. Students that will not fulfill this limit will be allowed to repeat the test once. Remedial dates for writing the credit test will be scheduled till 31.1.2009. Students that will not fulfill this requirement will not be given the course-unit credit.

Obtaining of course-unit credits of practices and seminars is the pre-requisite for registration to the examination of Medical chemistry and for enrollment of Biochemistry in the Spring semester.