UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2016/17/1
Course:	Chemical Calculations from General and Inorganic Chemistry II.
Code:	VEMKIKB222A
Responsible department:	Department of General and Inorganic Chemistry
Department code:	MKAK
Responsible instructor:	Erzsébet Szabóné Dr. Bárdos

Course objectives:

To attain the fundamental methods of chemical calculations and their practice (in equilibrium systems).

Course content:

1. Electrolysis I. 2. Electrolysis II. 3. Thermal dissociation. Equilibrial systems, dissociation. 4. Thermal dissociation. Equilibrial systems, dissociation. 5. Examination paper I. (3 exercises) 6. Electrolytic dissociation, colligativ properties of liquids 7. Calculation of pH: strong acids and bases. I. 8. Calculation of pH: weak acids and bases. II. 9. Examination paper II. (3 exercises) 10. Hydrolysis of salts 11. pH of buffers. I. 12. pH of buffers. II. 13. Examination paper III. (3 exercises) 14. Excersises (pH, hydrolysis of salts, pH of buffers) 15. Examination paper IV. (5 exercises)

Requirements, evaluation and grading:

During the semester the student is expected to write four examination papers (three of 3 exercises and one of 5 exercises atin the end of the semester). A student is allowed to write the final (5-exercise) examination paper if she or he collects at least 13 of the possible 30 points from the three 3-exercise papers. The solution of the first exercise of the final paper ought to be exact for the evaluation of the whole paper. The final mark will be given by taking the results of all papers written during the semester into account.A félévzáró dolgozatot csak az a hallgató írhatja meg, aki a félévközi dolgozatok 30 pontjából legalább 13 pontot elért. A félévvégi zárthelyi dolgozat beugró példájának hibátlannak kell lenni. A gyakorlati jegy: a félévközi és félévzáró zárhelyi dolgozat eredményének figyelembe vételével kerül megállapításra.

Required and recommended readings:

Maleczkiné Szeness Márta: Kémiai számítások-kémiai gondolatok, Veszprém, 1995. Maleczkiné Szeness Márta: Kémia egyensúlyok, Kézirat, 1992 Maleczkiné Szeness Márta: Sztöchiometria, kézirat, 1991