Information sheet for the course
Chemistry of glass and inorganic materials II

University: *Alexander Dubček University of Trenčín*	
Faculty: *VILA – Joint Glass Centre*	
Course unit code: *ChSAM II*	**Course unit title:** *Chemistry of glass and inorganic materials II*
Type of course unit: *compulsory*	
Planned types, learning activities and teaching methods: *Lecture: 3 hours weekly, face to face*	
Number of credits: *5*	
Recommended semester: *2. semester in the 1st year full-time*	
Degree of study: *II. engineer*	
Course prerequisites: none	
Assesment methods: *oral exam*	
Learning outcomes of the course unit: *Students have required knowledge of chemistry of elements, oxides, nitrides, carbides, silicates and aluminosilicates significant for glass and inorganic materials and of chemical reactions during preparation of significant inorganic materials and also reactions of these materials.*	
Course contents: 1. *Relation between a structure of electron shell of element and its place in the periodic table of elements* 2. *Relation between a structure of electron shell of element and its chemical characteristics* 3. *Chemistry of p-elements compounds* 4. *Chemistry of d-elements and f-elements compounds* 5. *Chemistry of oxides* 6. *Chemistry of silicates and aluminosilicates* 7. *Chemistry of carbides and nitrides* 8. *Chemistry of precursor preparations of inorganic materials and glass* 9. *Chemistry of sol-gel preparations of inorganic materials and glass* 10. *Chemical reactions during preparation of utility ceramics* 11. *Chemical reactions during preparation of glass* 12. *Chemical reactions during corrosion of ceramics* 13. *Chemical reactions during corrosion of glass*	

Recommended of required reading:

Kohout J., Melník M., Anorganická chémia 1,STU v Bratislave 1997 ISBN 80-227-0972-7

Ondrejovič, G., Boča R., Jóna E., Langfelderová H., Valigura D.: Anorganická chémia 2, STU v Bratislave 1995

Büchner W., Schliebs R., Winter G., Büchel K.H.: Průmyslová anorganická chemie, SNTL, Praha,

ISBN 80-03-00638-4

Koman M., Jamnický M.: Anorganické materiály. STU BRATISLAVA 2008. ISBN: 978-80-227-2798-3

Language: *Slovak*

Remarks:

Evaluation history:

A	B	C	D	E	FX
0	0	0	0	0	0

Lecturers:

doc. Ing. Alfonz Plško, CSc.

Last modification: *31. 1. 2014*

Supervisor: *prof. Ing. Marek Liška, DrSc.*