

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

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>VILA – Joint Glass Centre</i>	
Course unit code: <i>ChSAM_I</i>	Course unit title: <i>Chemistry of glass and inorganic materials I</i>
Type of course unit: <i>compulsory</i>	
Planned types, learning activities and teaching methods: Lecture: <i>3 hours weekly, face to face</i>	
Number of credits: <i>4</i>	
Recommended semester: <i>1. semester in the 1st year</i>	
Degree of study: <i>II. engineer</i>	
Course prerequisites: <i>none</i>	
Assesment methods: <i>Oral exam</i>	
Learning outcomes of the course unit: <i>Students have knowledge of thermodynamics of chemical reactions, balance of chemical reactions, kinetics of chemical reactions, chemical characteristics of solutions and heterogenic systems and of types of chemical reactions.</i>	
Course contents: <ol style="list-style-type: none"><i>1. Chemistry, basic terms and definitions</i><i>2. Enthalpy of chemical reaction</i><i>3. Gibbs energy of chemical reaction</i><i>4. Balance of chemical reaction</i><i>5. Kinetics of chemical reaction</i><i>6. Proteolytic reactions, reactions of hydrolysis and solvolysis</i><i>7. Complex-forming reactions</i><i>8. Precipitation reactions</i><i>9. Oxidative – reductive reactions</i><i>10. Heterogenic reactions</i><i>11. Structure of an atom</i><i>12. Theory of chemical bond</i><i>13. Chemical bond in solid matters</i>	

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

Lectures:

doc. Ing. Alfonz Plško, CSc

Last modification: *31. 1. 2014*

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