

Information sheet for the course
Machines and Equipment for the Production of Silicate Materials

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>	
Course unit code: <i>MI-I-V-6</i>	Course unit title: <i>Machines and Equipment for the Production of Silicate Materials</i>
Type of course unit: <i>optional</i>	
Planned types, learning activities and teaching methods: <i>Lecture: 2 hours weekly/26 hours per semester of study; face to face</i> <i>Seminar:0</i> <i>Laboratory tutorial:0</i>	
Number of credits: <i>2</i>	
Recommended semester: <i>2nd semester in the 1st year full-time</i> <i>2nd semester in the 1st year part-time</i>	
Degree of study: <i>the 2nd degree of study (Engineer's degree)</i>	
Course prerequisites: <i>none</i>	
Assessment methods: <i>Passing of written examination focused on knowledge obtained during semester.</i> <i>Acquirement 50 % of points in minimum from written examination is minimum condition for obtaining of credits.</i>	
Learning outcomes of the course unit: <i>Students have basic knowledge from area of machines and equipment in silicate industry.</i> <i>Students know basic principles of operation and service of ceramics equipment and glass machines used in whole technology process of glass production, i.e. from preparation of body until process of final refining. They are able to apply their knowledge to solve of specific technical problem.</i>	
Course contents: <ol style="list-style-type: none"> <i>1. Historical development and classification of machines and equipment in silicate industry</i> <i>2. Bank mixing plant, storage tanks, conveyor of raw materials</i> <i>3. Furnaces for silicate industry, glass melting aggregates</i> <i>4. Dosers and scissors, forms, presses</i> <i>5. Blowing machines</i> <i>6. Machines and equipment for production of packing glass</i> <i>7. Machines and equipment for production of glass tubes and rods</i> <i>8. Machines and equipment for production of glass fibers</i> <i>9. Cooling furnaces</i> <i>10. Grinding and cutting machines</i> <i>11. Machines for ignition and smelting</i> <i>12. Machine for refining</i> <i>13. Energy machines and equipment</i> 	
Recommended of required reading: <ol style="list-style-type: none"> <i>1. Rédr, M. - Příhoda, M.: Základy tepelné techniky. Praha, SNTL, 1995. 669 s.</i> <i>2. M. Paleček a kol.: Sklářské praktikum. SNTL, Praha 1990, 455 s.</i> <i>3. Hanykýř V., Kutzendorfer J.: Technologie keramiky, Vega s.r.o. 2000, ISBN 80-900960-6-3</i> <i>4. J. Hlaváč: Základy technológie silikátov, SNTL, Praha, 1987.</i> <i>5. S.Bachtík, V.Pospíchal: Zušlechťování skla. SNTL, Praha 1964, 295 s.</i> <i>6. J. Bleda : Sklářské a keramické stroje I</i> 	

7. <i>J. Hlaváček : Sklárske stroje</i>					
Language: <i>Slovak</i>					
Remarks: Number of evaluated students: <i>0</i>					
Evaluation history:					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Lecturers: <i>prof. Ing. Darina Ondrušová, PhD.</i>					
Last modification: <i>31.03.2014</i>					
Supervisor: <i>prof. Ing. Darina Ondrušová, PhD.</i>					