Information sheet for the course
Basic Chemistry

University: *Alexander Dubček University of Trenčín*	
Faculty: *Faculty of Industrial Technologies in Púchov*	
Course unit code: *PP-P-2*	**Course unit title:** *Basic Chemistry*
Type of course unit: *compulsory*	
Planned types, learning activities and teaching methods: *Lecture: 2 hours weekly/26 hours per semester of study; face to face* *Seminar: 0* *Laboratory tutorial: 0*	
Number of credits: *3*	
Recommended semester: *1st semester in the 1st year full-time* *1st semester in the 1st year part-time*	
Degree of study: *the 1st degree of study (Bachelor's degree)*	
Course prerequisites: none	
Assessment methods: *Student will elaborate a seminar work on the determined topic the extent of at least 10 pages; complete the final writing test (examination) 22 points out of 40. To obtain the evaluation A must be obtained 37 points at least, to obtain evaluation B 33 points at least, to obtain evaluation C 29 points at least, to obtain evaluation D at least 26 points and to obtain evaluation E 22 points at least.*	
Learning outcomes of the course unit: *The student has a complex knowledge in this area, knows the connections and relationships between different compounds, understands basic theories, methods and procedures.*	
Course contents: *The basic concepts, covalent bond, bonds in polymers.* *Alkanes, alkenes, alkynes. The preparation and use of polypropylene and polyethylene.* *Macromolecular entities, their distribution, synthetic and natural polymers.* *Types of reactions - preparation of polymers for fiber. Aromatic compounds, production and properties of PES, PET.* *Halogenderivates, production of PVC. Oxygen and nitrogen compounds, preparation and use of PAN.* *Aldehydes and ketones, PVA.* *Carboxylic acid types and uses, lactams.* *Plant and animal fibers their essential characteristics and types of bonds.* *Preparation and Use of PA 6 and PA-66.* *Basic concepts - color, dye, colourity, pigment, hue, saturation and brightness of color.* *Synthetic and natural dyes, basic types, the separation. Types of bonding substrate - dye. Types of dyes used for coloring of the individual systems.* *Coloring of animal and synthetic materials. Disperse dyes.*	
Recommended of required reading: *1. J. Kováč, Š. Kováč, Ľ. Fišera, A. Krutošíková: Organická chémia 1,2.-1. vyd. Alfa, Bratislava,*	

1992. 1292 s. ISBN 80-05-00766-3.
2. J. Svoboda: Organická chemie I, 1.vyd. VŠCHT, Praha, 2007. 310 s. ISBN 97-88-070-80561-9.
3. Militký J., Kryštúfek J.: Farbenie akrylových vlákien a zmesí. SNTL, Praha, 1986

Language: *Slovak*

Remarks:

Evaluation history:

A	B	C	D	E	FX

Lecturers: *doc. Ing. Petra Skalková, PhD.*

Last modification: *31.03.2015*

Supervisor: *doc. Ing. Ján Vavro, PhD.*