Information sheet for the course
Technology of Environment

University: *Alexander Dubček University of Trenčín*	
Faculty: *Faculty of Industrial Technologies in Púchov*	
Course unit code: *MI-P-12*	**Course unit title:** *Technology of Environment*
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: 2 hours weekly/26 hours per semester of study* *Laboratory tutorial:*	
Number of credits: *5*	
Recommended semester: *2nd semester in the 1st year full-time* *6th semester in the 3rd year part-time*	
Degree of study: *the 1st degree of study (Bachelor's degree)*	
Course prerequisites: *none*	
Assessment methods: *Students will each prepare term papers to analyze the microclimatic conditions of their work (residence). Term papers drawn up by each student in the exercises of the subject delivers as a ppt presentation in front of the teacher and classmates and answer questions in the debate. After completion of all Lecturers and exercises for the course, students receive written clearance focused on the knowledge acquired during the semester. The minimum condition for obtaining credits the successful presentation of the semester work and getting min. 50% of the points of the written examination.*	
Learning outcomes of the course unit: *The student has a comprehensive knowledge of the factors external and internal environment and their impact on the human body. It can analyze and evaluate the quality of the working environment, specify the physical, biological, ergonomic, and aesthetic and socio - psychological factors understands the principle of work techniques and equipment, and controls the nature of technological procedures to ensure optimal conditions of the working environment.*	
Course contents: 1. *The structure of the environment. Abated. Environmental factors.* 2. *Environmental factors and their effect on humans.* 3. *External climatic factors - temperature, humidity, air pressure, air flow. Solar radiation. Greenhouse effect.* 4. *Factors internal environment, classification and impact on the body.* 5. *Evaluation of microclimatic conditions. Temperature. Ventilation.* 6. *Air-conditioning - heating and cooling, heating equipment, cooling equipment.* 7. *Noise - main concepts, effects, reducing measures.* 8. *Lighting - basic concepts, vision, spectral properties of light, light environmental characteristics, functions of color. Light sources.* 9. *Abrasion. The wear on the body.* 10. *Pollutants in the air. Separators. Reducing emissions of oxides of S and N.* 11. *Ergonomics. Physiology of work.* 12. *Anthropometry. Somatografia. Perimetry. Fatigue.*	
Recommended of required reading: 1. *BLAŽEJ, A. A KOL: CHEMICKÉ ASPEKTY ŽIVOTNÉHO PROSTREDIA. BRATISLAVA/PRAHA, ALFA/SNTL, 1981.* 2. *HOSTIN, S. – ŠILHÁR, S. – SOLDÁN, M. – LACUŠKA, M.: ENVIRONMENTÁLNE*	

INŽINIERSTVO I. BRATISLAVA, STU, 2004. ISBN 80-227-2013-5
3. *SMOLÍK, J.: TECHNIKA PROSTREDIA. PRAHA, SNTL, ALFA, 1985.*
4. *TÖLGYESSY, J. – PIATRIK, M. – ČÍK, G. – HARANGOZÓ, M.: TECHNOLÓGIA ŽIVOTNÉHO PROSTREDIA. BRATISLAVA, STU, 1998. ISBN 80-227-1048-2*
5. *ŠKÁRKA, B. – POLÍVKA, Ľ. – FENDRICH, E. – HOSTÍN, S. – LACUŠKA, M.: ENVIRONMENÁLNA CHÉMIA. BRATISLAVA, STU, 2003. ISBN 80-227-1973-0*
6. *PROUSEK, J. – ČÍK, G.: ZÁKLADY EKOLÓGIE A ENVIRONMENTALISTIKY. BRATISLAVA, STU, 2004. ISBN 80-227-2097-6*
7. *LUMNITZER, E – BADIDA, M. – ROMANOVÁ, M.: HODNOTENIE KVALITY PROSTREDIA. KOŠICE, STU, 2007. ISBN 978-80-8073-836-5*

Language: *Slovak*

Remarks:

Evaluation history: *The total number of students assessed*: 0

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Lecturers: *prof. Ing. Darina Ondrušová, PhD., RNDr. Viera Mazíková, PhD.*

Last modification: *31.03.2014*

Supervisor: *prof. Ing. Darina Ondrušová, PhD.*