

Information sheet for the course Environment Technology

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>	
Course unit code: <i>MI-I-V-16</i>	Course unit title: <i>Environment Technology</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>3rd semester in the 2nd year full-time</i> <i>3rd semester in the 2nd 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>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.</i>	
Learning outcomes of the course unit: <i>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.</i>	
Course contents: <ol style="list-style-type: none"> <i>1. Structure of the environment. Environmental component. Environmental factors. External environmental factors and their effect on humans.</i> <i>2. The external climatic factors - temperature, humidity, air pressure, air flow.</i> <i>3. Solar radiation. Greenhouse effect.</i> <i>4. Factors of internal environment, classification and impact on the body. Working environment.</i> <i>5. Evaluation of microclimatic conditions. Temperature. Ventilation.</i> <i>6. Air-conditioning - heating and cooling, heating equipment, cooling equipment.</i> <i>7. Noise - the main terms, effects, reducing measures.</i> <i>8. Lighting - basic terms, eye, spectral properties of light, light properties of the surroundings, functions of color. Light sources.</i> <i>9. Pollutants in the atmosphere. Abrasion.</i> <i>10. Reducing of atmospheric pollutants - separators.</i> <i>11. Reducing emissions of oxides of S and N.</i> <i>12. Ergonomics. Physiology of work. Anthropometry.</i> <i>13. Somatografia. Perimetry. Tiredness.</i> 	
Recommended of required reading: <i>1. BLAŽEJ, A. A KOL: CHEMICKÉ ASPEKTY ŽIVOTNÉHO PROSTREDIA. BRATISLAVA/PRAHA, ALFA/SNTL, 1981.</i>	

<p>2. <i>HOSTIN, S. – ŠILHÁR, S. – SOLDÁN, M. – LACUŠKA, M.: ENVIRONMENTÁLNE INŽINIERSTVO I. BRATISLAVA, STU, 2004. ISBN 80-227-2013-5</i></p> <p>3. <i>SMOLÍK, J.: TECHNICA PROSTREDIA. PRAHA, SNTL, ALFA, 1985.</i></p> <p>4. <i>TÖLGYESSY, J. – PIATRIK, M. – ČÍK, G. – HARANGOZÓ, M.: TECHNOLÓGIA ŽIVOTNÉHO PROSTREDIA. BRATISLAVA, STU, 1998. ISBN 80-227-1048-2</i></p> <p>5. <i>ŠKÁRKA, B. – POLÍVKA, L. – FENDRICH, E. – HOSTÍN, S. – LACUŠKA, M.: ENVIRONMENÁLNA CHÉMIA. BRATISLAVA, STU, 2003. ISBN 80-227-1973-0</i></p> <p>6. <i>PROUSEK, J. – ČÍK, G.: ZÁKLADY EKOLÓGIE A ENVIRONMENTALISTIKY. BRATISLAVA, STU, 2004. ISBN 80-227-2097-6</i></p> <p><i>LUMNITZER, E – BADIDA, M. – ROMANOVÁ, M.: HODNOTENIE KVALITY PROSTREDIA. KOŠICE, STU, 2007. ISBN 978-80-8073-836-5</i></p>						
Language: <i>Slovak</i>						
Remarks:						
Evaluation history:						
The total number of students assessed: <i>1</i>						
A	B	C	D	E	FX	
0.0	100.0	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>						