

Information sheet for the course Objectification of Factors – Living and Working Environment

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Health Care</i>	
Course unit code: OFŽPP/d	Course unit title: Objectification of Factors – Living and Working Environment
Type of course unit: <i>compulsory</i>	
Planned types, learning activities and teaching methods: <i>Lecture: 1 hour weekly/13 hours per semester of study; full-time</i> <i>Seminar: 2 hours weekly/26 hours per semester of study; full-time</i>	
Number of credits: 3	
Recommended semester: <i>6th semester in the 3rd year (full-time)</i>	
Degree of study: <i>I (bachelor)</i>	
Course prerequisites: none	
Assessment methods: <i>To obtain credits for the course, a student must pass an oral examination and write a seminary work (100 points).</i> <ul style="list-style-type: none"> - <i>Seminary work designed for a situation model (25 points).</i> - <i>Oral examination (75 points).</i> <i>To obtain A, a student must score at least 90 points, to obtain B, a student must score at least 80 points, to obtain C, a student must obtain at least 70 points, to obtain D, a student must obtain at least 60 points, and finally to obtain E, a students must to obtain at least 50 points.</i>	
Learning outcomes of the course: A student can define the latest knowledge of laboratory testing methods during sampling and analysis of samples in living and working environments. A student is able to apply the achieved knowledge into practice. The knowledge concerns qualitative and quantitative analysis of samples received from living and working environments by means of modern instrumentation and equipment.	
Course contents: Lectures <ol style="list-style-type: none"> 1. Basic definitions – air, water as a subject of interest to public health, food, nutrition, essential nutrients. 2. Physical properties of drinking water. 3. Chemical properties of drinking water. 4. Instrumental methods in the analysis of water, principle and use. 5. Food, Codex Alimentarius, the Slovak Republic. 6. Contaminants in food – additive. 7. Contaminants in food – contaminating. 8. Sampling of air in the work environment. 9. Determination of chemical agents at work – solid aerosols, chemicals. 10. Biological exposure tests – basic definitions (half-time of school teaching), biological limit values, selected chemical pollutants and their metabolites. 11. Exposure assessment of workers at work – basic definitions of preventive occupational medicine. 12. Definitions of sound, noise, noise at work. 13. Noise in living environment. Seminars: <ol style="list-style-type: none"> 1. Basic definitions – air, water as subject matter of interest of public health, foodstuff, 	

nutrition, basic nutrients. 2. Determination of physical parameters in drinking water: organoleptic properties of water. 3. Determination of selected chemical parameters in drinking water (chlorides). 4. Practical exercises – spectrophotometric method. 5. Classification of additive and contaminating substances. 6. Determination of food additives (preservatives, liquid chromatography). 7. Determination of contaminants in food (metals). 8. Sampling in the workplace atmosphere. 9. Determination of chemical agents in the workplace atmosphere (gravimetry, gas chromatography). 10. Determination by the method of BET – exposure to toluene. 11. Exposure assessment of employees – Test reports. 12. Measurement of noise in the workplace 13. Noise in living environment.					
Recommended of required reading:					
1. ŠULCOVÁ, M., ČIŽNÁR, I., FABIÁNOVÁ, E.: Verejné zdravotníctvo. VEDA SAV Bratislava 2012. 654 s. ISBN 978-80-224-1283-4 2. HEGYI, L., Bielik, I.: Základy verejného zdravotníctva. SZÚ Bratislava. HERBA 2011. 280s. ISBN 978-80-89171-84-2 3. Objektivizácia faktorov prostredia. SZÚ Bratislava. HERBA 2004. 264s. ISBN 80-89171-18-4 4. BUCHANCOVÁ, J. A KOL.: Pracovné lekárstvo a toxikológia. Martin: Osveta, 2003. 1133 s. ISBN 80-8063-113-1 5. TOLGYESY A KOL.: Chémia, biológia a toxikológia vody a ovzdušia. Bratislava: SAV. 1989. 530s. ISBN 80-224-0034-3 6. ČAKRT, M., KRUPČÍK, J., MOCÁK, J. A KOL.: Analytická chémia Praktikum 1. Bratislava : SVST, 1985. 644 s. ISBN 80-05-0012-6.					
Language: Slovak					
Remarks:					
Evaluation history:					
A	B	C	D	E	FX
Lectures: RNDr. Mária Poláková, PhD.					
Last modification: 22.04.2014					
Supervisor: doc. MUDr. Mária Štefkovičová, PhD., MPH.					