

## Information sheet for the course Laboratory Methods in Microbiology

<b>University:</b> <i>Alexander Dubček University of Trenčín</i>	
<b>Faculty:</b> <i>Faculty of Health Care</i>	
<b>Course unit code:</b> LabMMik/e	<b>Course unit title:</b> Laboratory Methods in Microbiology
<b>Type of course unit:</b> <i>compulsory</i>	
<b>Planned types, learning activities and teaching methods:</b> <i>Seminar: 2 hours weekly/26 hours per semester of study; full-time</i> <i>Supervised practical output: 2 hours weekly/26 hours per semester of study; full-time</i>	
<b>Number of credits:</b> 3	
<b>Recommended semester:</b> <i>5<sup>th</sup> semester in the 3<sup>rd</sup> year (part-time)</i>	
<b>Degree of study:</b> <i>I (bachelor)</i>	
<b>Course prerequisites:</b> Microbiology I, Microbiology II.	
<b>Assessment methods:</b> Student receives 100 points per semester: - Elaboration of seminar work for determined by subject (25 points) - Test (75 points) For obtaining particular grades are required at least: 90 points for A, 80 points for B, 70 points for C, 60 points for D and 50 points for E	
<b>Learning outcomes of the course unit:</b> Student completing the course in microbiology laboratory method acquires knowledge of the latest investigative methods according to EU legislation, which are used for monitoring the microbiological and biological indicators of environmental samples. Become familiar with the identification of bacteria, which are the most common pathogens of nosocomial infections and diseases of food is as important biological indicators that may have a direct negative impact on human health while bathing in natural waters. Students master the basic methods work in microbiology.	
<b>Course contents:</b> 1. Examination methods in microbiology 2. Culture Media - vaccination 3. Gram staining preparations, training, examination preparation 4. Practical testing food samples for qualitative variables 5. Practical testing food samples for quantitative indicators, assessment, calculation 6. Practical microbiological testing of drinking water, treatment of samples, identification of bacterial strains 7. Biochemical identification of bacterial strains 8. Microbiological testing of samples of surface water 9. Microbiological examination of smears from the environment (medical equipment) 10. Microbiological examination of smears from the environment (food service) 11. Biological analysis of drinking water, sample processing, assessment 12. Biological analysis of surface water, sample processing, assessment 13. Processing and assessment of samples for biological control efficacy sterilizers	
<b>Recommended of required reading:</b>	

1. VOTAVA, M. 1999. Kultivační půdy v lékařské mikrobiologii. Brno:Hortus.1999 ISBN 80-238-5058-X.
2. SCHINDLER, J. 2010. Mikrobiologie pro studenty zdravotnických oborů. Praha: Grada Publishing a.s. 2010, ISBN 9788024731704
3. BENÁŘ, M. a kol. 1999. Lékařská mikrobiologie. Marvil s.r.o. 1999.
4. GÖRNER, F., VALÍK, L. 2004. Aplikovaná mikrobiológia požívatin. Malé Centrum. Bratislava 2004 ISBN 80-967064-9-7.
5. STN EN 7218 Všeobecné požiadavky a pokyny na mikrobiologické skúšanie. SÚTN Január 2008
6. Vyhláška MZ SR č.309/2012 o požiadavkách na vodu určenú na kúpanie
7. Nariadenie vlády SR č. 496/2010, ktorým sa dopĺňa Nariadenie vlády SR č. 354/2006 Z.z., ktorým sa ustanovujú požiadavky na vodu určenú na ľudskú spotrebu a kontrolu kvality vody určenej na ľudskú spotrebu.

**Language:** Slovak

**Remarks:**

**Evaluation history:** *Number of evaluated students:* -

A	B	C	D	E	FX
-	-	-	-	-	-

**Lectures:**

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**Last modification:** 22.04.2015

**Supervisor:** doc. MUDr. Mária Štefkovičová, PhD., MPH.