

**Information sheet for the course
Examination methods in Microbiology I.**

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Health Care</i>	
Course unit code: <i>VMMikr1/e</i>	Course unit title: <i>Examination methods in microbiology I.</i>
Type of course unit: <i>compulsory</i>	
Planned types, learning activities and teaching methods: <i>Lecture: 2 hours weekly/26 hours per semester of study; full-time</i>	
Number of credits: 3	
Recommended semester: <i>3rd semester in the 2nd year (part-time)</i>	
Degree of study: <i>I (bachelor)</i>	
Course prerequisites: <i>none</i>	
Assessment methods: <i>Written or oral examination (50 score points)- for obtaining the particular grades it is necessary to achieve:</i> <i>at least 45 score points for the grade A</i> <i>at least 40 score points for the grade B</i> <i>at least 35 score points for the grade C</i> <i>at least 30 score points for the grade D</i> <i>at least 25 score points for the grade E</i>	
Learning outcomes of the course unit: <i>Student will acquire comprehensive information on laboratory investigation methods in microbiology and specifics of their applications in healthcare. In addition to the methodological principles of diagnostic methods are explained to students the principles of proper handling of the samples in the different stages of the diagnostic process and the principles of quality management of the laboratory work.</i>	
Course contents: <i>1. Collection and transport of biological material for microbiological examination with good practice of handling for the collection and processing of biological material</i> <i>2. Principles of Good Laboratory Practice</i> <i>3. Sterilization and disinfection - definition of terms</i> <i>4. Physical and chemical methods of sterilization and disinfection</i> <i>5. Microscopic techniques - principles and applications.</i> <i>6. The optical microscope, the basic procedure for microscopy, using immersion oil, counting chamber.</i> <i>7. Diagnostic staining: principles, preparation and processing of the specimen.</i> <i>8. The cultivation of microorganisms - a basic overview.</i> <i>9. The types of culture media of bacteria, their composition and use.</i> <i>10. Determination of susceptibility for antimicrobial agents.</i> <i>11. Biochemical tests.</i> <i>12. The principles of quality management in laboratory work</i>	
Recommended of required reading: <i>1. VOTAVA, M.: 2005. Lékařská mikrobiologie obecná, Neptun, Brno, 2005, ISBN 9788086850009, 351 p.</i> <i>2. VOTAVA, M.: 2003. Lékařská mikrobiologie speciální, Neptun, Brno, 2003, ISBN 9788090289666, 945 p.</i> <i>3. BEDNÁŘ, M., FRAŇKOVÁ, V., SCHINDLER, J., SOUČEK, A., VÁVRA, J.: 1996.</i>	

<p><i>Lékařská mikrobiologie, Triton, Praha, 1996, ISBN 80-2380-297-6, 560 p.</i></p> <p>4. ŠTEFANOVIČ, J. 2008. <i>Lexikon lékařskej bakteriologie, Slovenská lekárska komora, Bratislava, 2008; 78 p.</i></p>					
Language: <i>Slovak</i>					
Remarks:					
Evaluation history: <i>Number of evaluated students: -</i>					
A	B	C	D	E	FX
-	-	-	-	-	-
Lectures: <i>RNDr. Vladimír Meluš, PhD., MPH</i>					
Last modification: <i>22.4.2014</i>					
Supervisor: <i>Doc. MUDr. Jana Slobodníková, CSc.</i>					