

Information sheet for the course Examination methods in genetics

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of Health Care</i>					
Course unit code: <i>VMGen/d</i>			Course unit title: <i>Examination methods in genetics</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>4th semester in the 2nd year (full-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 basic theoretical knowledge of the principles of laboratory examination methods in genetics, with emphasis on cytogenetic, genealogical and molecular-biological methods.</i>					
Course contents: <i>1. Cytogenetic analysis - meaning and usage</i> <i>2. Visualization techniques in cytogenetics</i> <i>3. Genealogical analysis, pedigree, used symbols</i> <i>4. Types of inheritance in genealogy</i> <i>5. Inbreeding, calculation of inbred coefficient</i> <i>6. DNA isolation, polymerase chain reaction</i> <i>7. Electrophoresis of DNA, determine the nucleotide sequence</i> <i>8. The use of restriction endonucleases</i> <i>9. Hybridization techniques</i> <i>10. Visualization of nucleic acids</i> <i>11. Genetic pathways</i>					
Recommended of required reading: <i>1. MELUŠ V., KRAJČOVIČOVÁ Z., SLOBODNÍKOVÁ J. 2011. Genetika pre zdravotnícke odbory. Trenčín 2011, 90 p., ISBN 978-80-89464-04-3</i>					
Language: <i>Slovak</i>					
Remarks:					
Evaluation history: <i>Number of evaluated students: -</i>					
A	B	C	D	E	FX
-	-	-	-	-	-
Lectures:					

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