

## Information sheet for the course Fundamentals of Statistics

<b>University:</b> <i>Alexander Dubček University of Trenčín</i>	
<b>Faculty:</b> <i>Faculty of Health Care</i>	
<b>Course unit code:</b> <i>ZakStat/d</i>	<b>Course unit title:</b> <i>Fundamentals of Statistics</i>
<b>Type of course unit:</b> <i>compulsory</i>	
<b>Planned types, learning activities and teaching methods:</b> <i>Seminar: 1 hour weekly/13 hours per semester of study; full-time</i>	
<b>Number of credits:</b> <i>3</i>	
<b>Recommended semester:</b> <i>3<sup>rd</sup> semester in the 2<sup>nd</sup> year (full-time)</i>	
<b>Degree of study:</b> <i>II (magister)</i>	
<b>Course prerequisites:</b> <i>none</i>	
<b>Assessment methods:</b> <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>	
<b>Learning outcomes of the course unit:</b> <i>Student receives practical skills needed for independent use of basic biostatistical methods and procedures for processing and evaluating data in the field of nursing and medical fields. In addition, the student acquires an overview of the basic procedures for solving problems, formulating the null hypothesis and verification, data evaluation and their correct interpretation.</i>	
<b>Course contents:</b> <i>1. Variables and their properties</i> <i>2. Descriptive statistics and its importance</i> <i>3. The target population, sample type selection</i> <i>4. Formulation of null and alternative hypotheses</i> <i>5. Verification of hypotheses using statistical tests</i> <i>6. The level of significance, I. and II. type error</i> <i>7. Parametrical tests</i> <i>8. Non-parametrical tests</i> <i>9. Types of tested files in nursing</i> <i>10. Interpretation of results</i> <i>11. The risks of improper use of statistical tests</i> <i>12. Entering solutions semester work by targeting individual students</i> <i>13. Presentation of the results from the application of statistical methods in specific cases solved the problems of individual students</i>	
<b>Recommended of required reading:</b> <i>1. MELUŠ V. - KRAJČOVIČOVÁ Z. - NETRIOVÁ J. Zásady štatistického spracovania dát a interpretácie výsledkov v zdravotníckych odboroch. Trenčín , 2013.</i> <i>2. ZVÁROVÁ, J. Základ statistiky pro biomedicínské odbory. Praha : Karolinum, 2007. 224 p. ISBN 80-7184-786-1.</i> <i>3. CHAJDIAK, J. Štatistika jednoducho v Exceli. Bratislava : Statis, 2013. 341 p. ISBN 978-80-85659-74-0.</i>	
<b>Language:</b> <i>Slovak</i>	
<b>Remarks:</b>	

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

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

**Lectures:**

*RNDr. Vladimír Meluš, PhD., MPH.*

**Last modification:** *22.4.2014*

**Supervisor:** *prof. MUDr. Adriana Ondrušová, PhD.*