

## Information sheet for the course Methodology of Hygiene and Epidemiology

<b>University:</b> <i>Alexander Dubček University of Trenčín</i>	
<b>Faculty:</b> <i>Faculty of Health Care</i>	
<b>Course unit code:</b> MetHygEpid/d	<b>Course unit title:</b> Methodology of Hygiene and Epidemiology
<b>Type of course unit:</b> <i>compulsory</i>	
<b>Planned types, learning activities and teaching methods:</b> <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> <i>Supervised practice output: 2 hours weekly/26 hours per semester of study;</i>	
<b>Number of credits:</b> 3	
<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>I (bachelor)</i>	
<b>Course prerequisites:</b> none	
<b>Assessment methods:</b> <i>The student will acquire 100 points per semester</i> <ul style="list-style-type: none"> <li>- writing an essay on the designated topic writing (25 points)</li> <li>- oral examination (75 points)</li> </ul> <i>Score:</i> <i>100 – 90 points – A</i> <i>89 – 80 points – B</i> <i>79 – 70 points – C</i> <i>69 – 60 points – D</i> <i>59 – 50 points – E</i> <i>49 and fewer points - FX</i>	
<b>Learning outcomes of the course unit:</b> <i>Student:</i> <ol style="list-style-type: none"> <li>1. Demonstrate knowledge of the basic concepts of epidemiological methods of work and the general principles of epidemiological studies applied in monitoring the health status of the population, can select the appropriate epidemiological method and use it.</li> <li>2. Demonstrate knowledge of the basic epidemic process of infectious diseases, the natural laws for different groups of infectious diseases. It is able to formulate basic epidemiologic measures and the methods of surveillance, acquire basic practical skills in epidemiology.</li> </ol>	
<b>Course contents:</b> <b>Lectures:</b> <ol style="list-style-type: none"> <li>1. Introduction to Epidemiology I - essential characteristics of epidemiology, measurement of health and diseases, indicators of health and disease in the population.</li> <li>2. Introduction of Epidemiology II – standardization, causality diseases, random and systematic errors, bias, risk</li> <li>3. Methods of epidemiology I - the basic epidemiological methods, screening, the basic epidemiological methods</li> <li>4. Methods of epidemiology II - epidemiological studies, aims, methods, file</li> <li>5. Methods of epidemiology III – types of epidemiology methods</li> <li>6. Methods of epidemiology IV – Metaanalysis, Pooling, Surveillance</li> <li>7. Methods of epidemiology V – project in epidemiology</li> <li>8. Methods of epidemiology VI - register, dispensary, monitoring in the household</li> <li>9. General Epidemiology I – mechanism of spread (source of infection, transmission routes,</li> </ol>	

susceptible individual, forms of infection, dynamics of spreading in the population).

10. General Epidemiology II – antiepidemic measures (aimed at eliminating source of infection, to interrupt transmission routes to obtain immunity susceptible individual or population), work on the outbreak.
11. Epidemiological information system
12. Foundations EPIINFO I
13. Foundations EPIINFO II

**Seminars:**

1. Demonstration of the importance of standardization of different populations
2. Assembling the Tree of Life two populations from different regions of Slovakia, the discussion about the causes of differences.
3. Examples of measurements of disease in the population, calculation of indicators of disease (mortality, lethality, incidence, prevalence), interpretation of results.
4. Practicing file selection for epidemiological surveillance type selection
5. Practice screening, calculating specificity, sensitivity
6. Practice variability survey methods and measurable, types of errors, bias, discussion.
7. Practical exercise risk assessment: Examples of calculating odds ratio, relative risk, interpretation of results.
8. Exercise creation and processing of the questionnaire, use the EPI INFO.
9. Types of epidemiological studies - found in the literature argument appropriateness of the objectives set.
10. Processing the results in tables and graphs - presentation of results of epidemiological surveillance.
11. Training in the use of epidemiological studies - descriptive, determine its objective presentation of results.
12. Training choice epidemiological study - analytical, determine its objective presentation of results.
13. Training of choice epidemiological study - intervention, determine its objective presentation of results.

**Recommended of required reading:**

1. EGNEROVÁ, A. 2010. Epidemiológia – základy a metódy Učebné texty SZU, Bratislava, 2010, 141 s. SBN 978-80-89352-07-4
2. KRIŠTÚFKOVÁ, Z.: Epidemiológia In: HEDYI, L., BIELIK, I. a kol.: Základy verejného zdravotníctva HERBA Bratislava 2011 s. 280. ISBN 978-80-89171-84-2
3. KRIŠTÚFKOVÁ, Z.: Epidemiologické metódy vo verejnom zdravotníctve In: ŠULCOVÁ, M., ČIŽNAR, I., FABIÁNOVÁ, E.: a kol.: Verejné zdravotníctvo. VEDA vydavateľstvo SAV 2012, 654 s. ISBN 978-80-224-1283-4
4. BAKOŠ, P. a kol. 2011. Epidemiológia 3.vydanie. Učebnica pre lekárske fakulty, LFUK, Bratislava, 2011, 520 s. ISBN 987-80-233-2929-3
5. MÁDEROVÁ, E. a kol. 2005. Epidemiológia I, učebné texty, Slovenská zdravotnícka univerzita, Fakulta verejného zdravotníctva, 2005
6. MÁDEROVÁ, E. a kol. 2005. Epidemiológia II, učebné texty, Slovenská zdravotnícka univerzita, Fakulta verejného zdravotníctva, 2005
7. GÖPFERTO VÁ, D., PAZDIORA, P., DÁŇOVÁ, J. 2006. EPIDEMIOLOGIE (obecná a speciální epidemiologie infekčních nemocí). Univerzita Karlova v Praze, nakladatelství Karolinum, Praha 2006, 299s. ISBN 80-246-1232-1

**Language:** Slovak

**Remarks:**

**Evaluation history:** Number of evaluated students

A	B	C	D	E	FX
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<b>Lectures:</b>	doc. MUDr. Mária Štefkovičová, PhD., MPH.				
<b>Last modification:</b>	22.04.2015				
<b>Supervisor:</b>	doc. MUDr. Mária Štefkovičová, PhD., MPH.				