

## Information sheet for the course Information Technology

<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>IT/e</i>	<b>Course unit title:</b> <i>Information Technology</i>
<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>	
<b>Number of credits:</b> <i>2</i>	
<b>Recommended semester:</b> <i>1<sup>st</sup> semester in the 1<sup>st</sup> year (part-time)</i>	
<b>Degree of study:</b> <i>I (bachelor)</i>	
<b>Course prerequisites:</b> <i>none</i>	
<b>Assessment methods:</b> <i>During semester student can get 50 points:</i> For assesment A is necessary get at least 45 points, for B at least 40 points, for C at least 35 points, for D at least 30 points and for E minimum 25 points.	
<b>Learning outcomes of the course unit:</b> Student obtain study course "Information Technology" basic understanding of basic concepts and theoretical principles of information technology, communicate the information systems and practical learning to work with them, become familiar with the approaches to the formation of IS and the possibility of using them in their professional action. Become familiar with the concept of making use of expert systems and artificial intelligence in medical environment.	
<b>Course contents:</b> <ol style="list-style-type: none"> <li>1. Safety of information technology - cybercrime.</li> <li>2. Communication and communication services - network topologies, access methods.</li> <li>3. Information Systems (IS) and their structure - and their qualification systems, automated systems, information systems.</li> <li>4. Planning and management in organizations. Information and knowledge management. Action IS in organizations.</li> <li>5. Life cycle of Information Systems -making process Information Systems (initial study, analysis, system design, implementation, installation and operation ...).</li> <li>6. Technical environment - the impact on data processing and generation of information, pooling of resources.</li> <li>7. Database environment in IS - file and his organization DBMS (representatives and structure).</li> <li>8. Methodology of IS - structured analysis, object-oriented analysis and design, feasibility analysis.</li> <li>9. The use of information systems in health care, specific applications. An example study of the real system and its operation.</li> <li>10. Units Computer and device. Peripherals process control. Organization transfer. Conditional and unconditional transfers. DMA transfer. Security a "safe" process.</li> <li>11. Privacy Policy patient, staff. Legal and ethical aspects of the processing of data of individuals in information systems.</li> <li>12. Artificial intelligence, classical approaches, neural networks as a software and hardware application.</li> <li>13. Expert systems and their application in health care.</li> </ol>	
<b>Rekomended of required reading:</b> <ol style="list-style-type: none"> <li>1. KOKLES, M. A KOL.1999. <i>Informatika</i>. Bratislava : Ekonóm, 1999.; MOLNÁR, Ľ.1996.</li> </ol>	

*Informačné systémy*. Bratislava : STU, 1996.;

2. JAŠKOVÁ, Ľ. – ŠNAJDER, Ľ. – BARANOVICĎ, R. 2003. *Práca s internetom*. Bratislava : SPN, 2003, 48 s. ISBN 80-10-00158-9.
3. BERGER, J.1994. *Informatika v klinické praxi*. Praha: Grada, 1994. 424 s.
4. BROŽ, M., ALCNAUE, J. *Základy informatiky*. 2011. Praha, Vysoká škola obchodní v Praze. ISBN 978-80-868-4132-8.

**Language:** Slovak

**Remarks:**

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

A	B	C	D	E	FX
20,47	32,64	26,17	12,69	6,99	1,04

**Lectures:**

PhDr. Pavel Grabczak, PhD.

**Last modification:** 22.04.2014

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