

Information sheet for the course Informatics

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Social and Economic Relations</i>	
Course unit code: <i>KEaE/lz5Pd/10</i>	Course unit title: <i>Informatics</i>
Type of course unit: <i>compulsory</i>	
Planned types, learning activities and teaching methods: <i>2 hours of lectures / 2 hours of seminars. 28 hours of lectures / 28 hours of seminars per semester. Full-time.</i>	
Number of credits: <i>4</i>	
Recommended semester: <i>1st</i>	
Degree of study: <i>I (Bachelor)</i>	
Course prerequisites: <i>none</i>	
<p>Assessment methods: <i>At the beginning of the semester, students will take an entry test (not assessed), which will be used to define the difficulty of teaching. During the semester, active involvement in seminars and lectures will be assessed (max. 10 % of the total score). Semester project will be assessed partially during the semester (max. 20 % of the total score) and at the end of the semester (max. 40 % of the total score). It will at the end of the semester test from the theoretical knowledge evaluated max. 30 % min. 18 % of the total evaluation. Assessment: 100 % (60 % in the examination, 30 % in theoretical part, 10 % for active participation).</i></p> <p><i>A: 87 % B: 80 % C: 73 % D: 67 % E: 60 %</i></p> <p><i>Credits will not be awarded to students who obtain less than 18 % in the test. At the end of the semester during the examination period: The final grade – received average.</i></p>	
<p>Learning outcomes of the course unit: <i>After successful course completion, students will have theoretical knowledge in the field of informatics, information and communication technologies. Students will understand the use of information and communication technologies and will be capable of making use of information systems currently. Students will have practical skills in Microsoft Office, and Microsoft Visio and utilities of Windows.</i></p>	
<p>Course contents: <i>1 Organisational instructions during the semester, the organization exercises, LMS system and its use. 2 Development of informatics, cybernetics. Basic concepts: information, informatics, informatisation, information theory, classification of information, characteristics of information, information entropy, and level of informing, redundancy, communication process, pragmatic and semantic content information. 3 Principles of mathematical logic, Boolean algebra, numerical system, transfer and display numbers. 4 Algorithms, types of algorithms, classification of algorithms. 5 Concept of computers, history of computers, computer architecture. 6 Operating systems, hardware solutions PC, PC components. 7 Program appropriations and their use. 8 Theory of data organization and data structure, data operations. 9 Programming, programming languages, their classification and use.</i></p>	

10 The problem, decision-making, modeling, information system as a tool for problem solving.
 11 View information, definition of entity, relational diagrams, data flow diagram, database management systems, database, data protection, sources of danger, integrity, reliability, availability, accountability, elements of IT security, safety analysis.
 12 INTERNET, computer viruses and anti-virus protection.
 13 Computer networks - Topology of computer networks, ISO - OSI model network communication, computer LAN, MAN, WAN, basic, switching networks. Disadvantages of the current LS, integrated business IS, IS management.

Recommended of required reading:

Kočíková, E.: *Informatika pre neinformatikou*. TnUAD, Trenčín 2013
 Kočíková, E. – Jašková, D. – Janošcová, R.: *Základy informatiky I*. TnUAD, Trenčín 2007
 Kočíková, E. – Janošcová, R.: *Základy informatiky II*. TnUAD, Trenčín 2007
 Bitto, O.: *Microsoft Windows 8*. Computer Press, Praha 2012
 Břiza, V.: *Visio 2003*, Grada Publishing, Praha 2005
 Chajdiak, J.: *Štatistika v Exceli*. Statis, Bratislava 2013
 Čuchran, J.: *Digitálne prenosové systémy*. STU, Bratislava 2008
 Orgoň, M.: *Bezpečnosť sietí budúcich generácií*. STU, Bratislava 2012
 Odborné časopisy *PC World, PC Revue, Chip, PC Magazine,...*

Language: Slovak

Remarks:

The course is provided in the winter semester in the first year of full-time study and in summer semester in the first year of part-time study. The course is compulsory. Number of students in the seminar group is 15 to 18 students.

Evaluation history:

Total number of students being assessed: 667

a	b	C	d	e	fx
11.84	18.74	33.58	16.94	11.39	7.5

Lectures: RNDr. Dana Jašková, PhD., Ing. Elza Kočíková, PhD., Ing. Zuzana Križanová, PhD.

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