

Information sheet for the course Mechanics of Bodies I

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>	
Course unit code: <i>PP-P-14</i>	Course unit title: <i>Mechanics of Bodies I</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; face to face</i> <i>Seminar: 2 hours weekly/26 hours per semester of study; face to face</i> <i>Laboratory tutorial: 0 hours</i>	
Number of credits: 5	
Recommended semester: <i>3rd semester in the 2nd year full-time</i> <i>3rd semester in the 2nd year part-time</i>	
Degree of study: <i>the 1st degree of study (Bachelor's degree)</i>	
Course prerequisites: <i>PP-P-1 Mathematics I, PP-P-8 Mathematics II, PP-P-9 Physics I, PP-P-7 Information Science I, PP-P-12 Information Science II</i>	
Assessment methods: <i>Semestral work, Test</i>	
Learning outcomes of the course unit: <i>The student can independently solve tasks in the field of vector mechanics (equilibrium point, the balance of the body balance system bodies, whip system, passive resistance, Kinematics and body.</i>	
Course contents: <i>Basic concepts and values. Axioms and basic sentences. Power system. Static binding. The balance point of the body systems and bodies. The center of gravity of the body. Whip system. Friction. Introduction to Kinematics of a body, determining the path, velocity and acceleration of point and body. Translation, rotation and general plane motion, spatial movement of the body.</i>	
Recommended of required reading: <ol style="list-style-type: none"> 1. VAVRO, J., VAVRO, J.ml.: <i>MECHANIKA I-Statika, Fakulta priemyselných technológií so sídlom v Púchove, TnUAD v Trenčíne, 2011</i> 2. VAVRO, J., TVARŮŽEK, J.: <i>Statika – príklady, ŽU v Žiline 1996, ISBN 80-7100-381-6.</i> 3. VAVRO, J., KOPECKÝ, M.: <i>Nové prostriedky a metódy riešenia sústav telies I, ZUSI v Žiline 2001, ISBN 80-968605-0-X.</i> 4. JANČINA, J., PEKÁREK, F.: <i>Kinematika, Alfa Bratislava 1987</i> 	
Language: <i>Slovak</i>	
Remarks: <i>subject is provided only in the winter semester, when it entered at least 5 students</i>	

Evaluation history:					
A	B	C	D	E	FX
Lecturers: <i>prof. Ing. Ján Vavro, PhD., doc. Ing. Ján Vavro, PhD. Ing. Petra Kováčiková, PhD.</i>					
Last modification: <i>31.03.2015</i>					
Supervisor: <i>doc. Ing. Ján Vavro, PhD.</i>					

