Faculty of Forestry									
Study programme:	Forestry		Degree level: full-time/part-time programme:				mme:	elor's degree	
Specialization			Diploma path:				general academic-		
Module name:	Physics								
Module type:	obligatory	Se	mester:	Ι		ECTS			4
No. of hrs in semester:	L -15	C -		LC-		P-15	SW-	-	S-
Prerequisites:	Knowledge on the level of hig school	h							
	lecture and classes		Assessment:						
Teaching methods:			lecture - oral exam, tests						
Aims and objectives:	Student will get a deepened knowledge from all basic sections of physics in order to comprehend a basic physics of the forestry								
Module content:	Fundamental physical quantities. International System of Units SI. Space and time in classical mechanics. Kinematics and dynamics of the material point. Gravitation. Work, energy and power. Dynamics of rigid body. Stress and deformation. The laws of Thermodynamics. Hydrodynamics. Elements of acoustic phenomena. Optics. Electric and magnetic properties of matter. Electromagnetic waves. Photons, electrons and atoms. Elements of Nuclear Physics. Elements of Mechanics of Relativity. Elements of Quantum Mechanics.								
Learning outcomes	Student should formulate observed phenomena in forestry in the context of basic Relevance to the programme learning outcomes								
EK1	Recognises phenomenas and physical laws					L1_W01			
EK2	Defines the physical quatities						L1_WO1		

EK3	Analyses of a given physical problem	L1_WO1		
EK4	Applay a proper strategy and methodology for the problem	L1_WO1		
EK5	Identifies physical the phenomenas of physics in the forest environment	L1_01,L1_KO1		
	lecture attendance	15X1h	15	
	participation in classes, laboratory classes, etc.	15X1h	15	
	participation in consulting	5X1h	5	
preparation for tests	preparation for tests	10X1h	10	
orklo	preparation for evaluation and attendance	5X2h	10	
it wc	Applay a proper strategy and methodology for the problem dentifies physical the phenomenas of physics in the forest environment ecture attendance participation in classes, laboratory classes, etc. participation in consulting preparation for tests preparation for evaluation and attendance preparation for evaluation and attendance preparation for and participation in exams/tests Student workload - activities that require direct teacher participation Naklad pracy studenta związany z zajęciami o charakterze praktycznym 20+5+10+7+7 David Halliday I inni, Podstawy Fizyki, T. 1. Mechanika, PWN, 2009, M. Skorko, i methods of assessing learning outcomes evaluation for the lecture content evaluation for the lecture content evaluating the student's reports, tests on lecture content	7+1h	8	
uder				
str				
		TOTAL:	60h	
	Student workload activities that require direct togeher participation		ECTS	
quantitative	Student workload - activities that require direct teacher participation	36	1,5	
indicators	Nakład pracy studenta związany z zajęciami o charakterze praktycznym: 20+5+10+7+7	49	2	
basic references:	David Halliday I inni, Podstawy Fizyki, T. 1. Mechanika, PWN, 2009, M. Skorko, Fi	izyka, PWN, 1982		
supplementary references:	Richard Feynman I inni, Feynmana wyklady z fizyki Tom 1 - 5, PWN, 1995, Paul G.	. Hewitt, Fizyka wokol	nas, PWN, 2010	
learning	methods of assessing learning outcomes	type of class (if more than one) where		
	evaluation for the lecture content			
FK2	evaluating the student's reports and preparation for the classes , tests on recture	 P		
	content	 ,r		
EK3	evaluating the student's reports, tests on lecture content	L		

EK4	evaluating the student's reports and	Р	
Department:	Faculty of Forestry, Technical University of Bialystok, Hajnowka	Group instructors:	dr Michal Piwnik
Date:	12-02-2012	Coordinator:	dr Michal Piwnik

L - lecture C - class LC - laboratory class P-project SW - specialization workshop S - seminar