Faculty of Forestry…..				
Study programme:	Forestry	Degree level: full-time/part-time programme:	Bachelor's degree	
Specialization		Diploma path:	general academic-	
Module name:	Mathematics			
Module type:	obligatory	Semester: I	ECTS	4
No. of hrs in semester:	L -15	C - 15	LC-	P SW-
Prerequisites:	*Knowledge on the level of high school*			
Teaching methods:	*lecture and practice*	*Assessment:*	*credit*	
		lecture - oral exam, tests		
Aims and objectives:	*Student will obtain fluency in use of mathematical methods and ability to formulate and use of mathematical models in understanding problems in forestry.*			
Module content:	*Sets and number functions. Sequence and number series. Limit and continuity of a function. Derivative of a function of one variable. Investigation of a function of one variable. Indefinite iintegrals. Definite integrals. Differential equations. Set of linear equations. Elements of analytical algebra.*			

Learning outcomes	*Learning outcomes:student should be ready to use mathematical methods and models to evaluate problems in forestry.*	*Relevance to the programme learning outcomes*
EK1	Defines sets, functions, series, derivatives, integrals	W
EK2	Applies definitions and theorems	W,C
EK3	Determines limits of series and functions	C
EK4	Determines derivatives, integrals	C
EK5	Figures out systems of linear equations	C
LO6		
LO7		
LO8		

nt workload			
	lecture attendance	15x1h=	15h
	participation in consultings	5x1h=	5h
	participation in classes	15x1h=	15h
	preparation for tests	10x1h=	10h
	preparation for evaluation and attendance	5h+2 h=	7h
	preparation for and participation in exams/tests	10+1h	11h

studer			
		RAZEM:	63h
		TOTAL:	60h
quantitative indicators	Student workload - activities that require direct teacher participation 15+5+15+2+1	38	ECTS 1,5
	Student workload - practical skills activities 15+5+15+2+11	48	2
basic references:	*Edward Zych, Matematyka, Bialystok, 2004, W. Krysicki I inni, Analiza matematyczna w zadaniach, PWN, 2010, A. J. Kostrykin, Podstawy algebry, PWN, 2010.*		
supplementary references:	*Donald A. McQuarie, Matematyka, dla przyrodnikow I inzynierow, PWN, 2009, Helena Rasiowa, Wstep do matematyki wspolczesnej, PWN, 2010*		

learning outcomes	*methods of assessing learning outcomes*	type of class (if more than one) where the outcomes are assessed
EK1	Defines sets, functions, series, derivatives, integrals	L
EK2	Applies definitions and theorems	L,C
EK3	Determines limits of series and functions	C
EK4	Determines derivatives, integrals	C
EK5	Figures out systems of linear equations	C

Department:	Faculty of Forestry, TUof B, 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