Faculty of Forestry in Hajnowka					
Study programme:	**forestry**	Degree level: time/part-time programme:	full-	**First degree undergraduate (BSc 7 semesters) full-time**	
Specialization		Diploma path:		**-**	
Module name:	**chemistry**				
Module type:	**obligatory**	Semester:	ECTS **4**	Module ID:	**L1010**
No. of hrs in semester:	L - 15 C - LC- 30 P- SW- S-				
Prerequisites:	*Complete with prerequisites or "-"*				
Teaching methods:	*lecture, class, laboratory class, project, seminar, specialization workshop*	*Assessment:*	*Evaluation must be relevant to the intended learning outcomes*		
		e.g.: lecture - written exam, oral exam, tests; class - two tests; laboratory class - evaluation of reports, verification of preparation for classes, tests; project - completion, presentation and discussion of the project			
Aims and objectives:	*To familiarize students with the basics concepts of general chemistry. Presentation of chemical processes occurring in the environment. Acquire the skills to understand and describe the chemical processes that occur in nature.*				
Module content:	*Lecture - written exam, lab - test, report on the performance practice*				

Learning outcomes	*Periodic table of elements and atomic structure. The types of chemical compounds and their properties. Chemical bonds types. The types of chemical reactions. Elements of organic and inorganic chemistry. Elements of thermodynamics and chemical kinetics. Sorption processes. Colloidal systems. Weight and titration analysis.*	*Relevance to the programme learning outcomes*	
LO1	familiar with the basic concepts of chemical	K_W01	
LO2	known types of chemical reactions	K_W01	
LO3	knows the basic laws of chemistry	K_W01	
LO4	able to recognize and use the laboratory equipment	K_U01	
LO5	known inorganic and organic	K_U01	
LO6	able to provide chemical changes in the environment by means of reaction equations	K_U01	
LO7	able to perform chemical calculations	K_U01	
LO8	can independently solve problems	K_K05	
ad	lecture attendance	15 x 1h	15
	participation in classes, laboratory classes, etc.	15 x 2h	30
	preparation for classes, laboratoratory classes, projects, seminars, etc.	5 x 1h	5
	work on projects, reports, etc.	15 x 2h	30

student workloa	participation in student-teacher sessions related to the class / seminar / project		
	implementation of project tasks	10	10
	preparation for and participation in exams/tests	15	15
		TOTAL:	105
quantitative indicators	Student workload - activities that require direct teacher participation 15h+30h+5h	50	ECTS
			2
	Student workload - practical skills activities 30h+5h+30h+10h	75	3

basic references:	*Mastalerz P. „Elementarna chemia nieorganiczna", Wyd. Chemiczne, Wrocław 2000, Lewandowski W. i in. „Wstęp do chemii ogólnej", Wyd. Politechniki Białostockiej, Białystok 2009, MacMurry J. „Chemia organiczna cz. 1, 2, 3", Wyd. Nauk. PWN, Warszawa 2005, Kucharski M., Samsonowicz M., Strutyńska G.,"Ćwiczenia laboratoryjne z chemii", cz.1, Oficyna Wyd. Politechniki Białostockiej, Białystok 2009.*
supplementary references:	*Cox P.A. „Chemia nieorganiczna-krótkie wykłady", Wyd. Nauk. PWN, Warszawa 2004, Patrick G. „Chemia organiczna-krótkie wykłady", Wyd. Nauk. PWN, Warszawa 2008.*

learning outcomes	*methods of assessing learning outcomes*	type of class (if more than one) where the outcomes are assessed
LO1	evaluating the student's reports and preparation for the classes	L
LO2	evaluating the student's reports and preparation for the classes , tests on lecture content	L
LO3	evaluating the student's reports, tests on lecture content	L
LO4	evaluating the student's reports, tests on lecture content	LC
LO5	evaluating the student's reports and performance in classes	LC
LO6	discussion of the student's reports, evaluation of the student's performance in classes	LC
LO7		
LO8		

Department:		Group instructors:	Ewa Zapora, PhD
Date:	01.10.2014	Coordinator:	Ewa Zapora, PhD

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