

Faculty of Forestry in Hajnowka							
Study programme:	forestry		Degree level: First degree undergraduate (BSc 7 semesters) part-time		full-time/part-time programme:		
Specialization			Diploma path: -				
Module name:	chemistry						
Module type:	obligatory	Semester:	I	ECTS	4	Module ID: LN1010	
No. of hrs in semester:	L - 10	C -	LC- 20	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			
			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	
a	lecture attendance					10 x 1h	10
	participation in classes, laboratory classes, etc.					10 x 2h	20
	preparation for classes, laboratory classes, projects, seminars,					5 x 1h	5
	work on projects, reports, etc.					20 x 2h	40

student workload	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