No. 49

Course syllabus for First cycle studies					
1.	**Course title**	General and Inorganic Chemistry 1			
2.	**Code**	MDE1M2			
3.	**Study Program**	Metallurgical Digital Engineering			
4.	**Study program organizer (unit, institute, department, division)**				
5.	**Degree (first, second, third cycle)**	First degree			
6.	**Academic year / semester**	I semester	7.	**Number of ECTS**	7
8.	**Instructors**	Gordana Ruseska, full professor Biljana Angjuseva, full professor			
9.	**Prerequisites for course enrollment**	/			
10.	**Objectives of the course syllabus (competences):** **Acquired skills (competences):**				
11.	**Content of the course:** Chemistry as a Natural Science Types of Matter Laws for chemical combination of elements by mass Law for chemical combination of elements by volume Gas laws Modern concept of chemical element Atomic and molecular mass Electronic configuration Types of chemical bonds (ionic, covalent and metallic bonds) Thermochemical equations (heat effects of chemical processes) Rate of chemical reaction				
12.	**Study methods:**				
13.	**Total available time**				
14.	**Allocation of available time**				
15.	**Teaching activities**	15.1.	Lectures	45 hours	
		15.2.	Labotatory and Classroom Exercises	45 hours	
16.	**Other types of activities**	16.1.	Project Tasks	20 hours	
		16.2.	Independent Tasks	40 hours	
		16.3.	Homework	90 hours	
17.	**Grading system**				
	17.1.				
	17.2.				
	17.3.				
18.	**Grading criteria**	Up to 61 points		5 (five) (F)	

	(points/grade)	From 61 to 69 points	6 (six) (E)
		From 70 to 79 points	7 (seven) (D)
		from 80 to 89 points	8 (eight) (C)
		From 90 to 95 points	9 (nine) (B)
		from 95 to 100 points	10 (ten) (A)

19.	**Prerequisites for taking the final exam**	
20.	**Language in which lectures are conducted**	
21.	**Method for monitoring the quality of lectures**	

22. **LITERATURE**

22.1. Compulsory literature

No.	Author	Title	Publisher	Year
1.	N.N. Greenwood A. Earnshaw	Chemistry of the elements (Second Edition) ISBN: 9780750633659		1997
2.	Raymond Chang, Jason Overby ISBN:9780076812141	CHEMISTRY Edition 13	MC graw Hill Education	2018
3.				

22.2. Additional literature

No.	Author	Title	Publisher	Year
1.	A. Smith	Intro-duction to general inorganic chemistry	2012	
2.				
3.				