Course ID: HOA231	**Course name: INORGANIC CHEMISTRY I**		
Cycle: FIRST	**Year: SECOND**	**Semester: III**	**ECTS credits:7**
Course status: MANDATORY		**Total course hours: 105** Lectures: 45 Laboratory: 60	
Teaching participants:	Teachers and associates with expertise in the field of Inorganic Chemistry		
Prerequisite for enrollment:	-		
Course aims:	Study of the chemistry of s- and p-elements through comparability of general, physical and chemical properties of elements and the most important classes of their compounds. Change in bond type, structural elements, acid-base and oxido-reduction properties.		
Thematic course units:	1. General properties of elements and their change through groups and periods 2. Basic classes of inorganic compounds 3. Hydrogen 4. s-elements 5. Noble gases 6. p-elements 7. Elements of the boron group 8. Elements of the carbon group 9. Elements of the nitrogen group 10. Elements of the oxygen group 11. Elements of the fluorine group		
Learning outcomes:	After the course the student will be able to: – explain the periodic properties of atoms – use vertical, horizontal and diagonal similarity indicators to predict the physical and chemical properties of elements and their compounds within the s- and p-blocks – understand and predict the structures of elementary substances and molecular and crystalline binary and ternary compounds of s- and p-elements – understand, explain and compare general, physical and chemical properties and methods of obtaining elemental substances, binary and ternary compounds of s- and p-block		

<table>
<tr><td></td><td>elements with emphasis on oxides (chalcogenides), halides, hydroxides, oxosalts and oxoacids
– predict and compare acid-base properties of s- and p-block elemental substances and compounds by groups and periods
– predict and compare redox properties of s- and p-block elemental substances and compounds by groups and periods
– know, explain, predict and distinguish the chemical reactivity of the elements of s- and p-block and their ionic and molecular compounds within groups and periods, and on this basis, to predict the products of chemical reactions</td></tr>
<tr><td>Teaching methodology:</td><td>Auditory lectures, laboratory exercises</td></tr>
<tr><td>Assessment methods and grading system[1]:</td><td>
<table>
<tr><td colspan="3">Grading criteria</td></tr>
<tr><td>Criteria</td><td>Maximal score</td><td>Required score</td></tr>
<tr><td>1. Class attendance</td><td>5</td><td>3</td></tr>
<tr><td>2. Class activities</td><td>5</td><td>2</td></tr>
<tr><td>3. Midterms</td><td>2 × 25</td><td>2× 14</td></tr>
<tr><td>4. Final exam*</td><td>40</td><td>22</td></tr>
<tr><td>Total</td><td>100</td><td>55</td></tr>
<tr><td colspan="3">Scores and grading</td></tr>
<tr><td>Score</td><td>Grade (BiH)</td><td>Grade (ECTS)</td></tr>
<tr><td>< 55</td><td>5</td><td>F, FX</td></tr>
<tr><td>55–64</td><td>6</td><td>E</td></tr>
<tr><td>65–74</td><td>7</td><td>D</td></tr>
<tr><td>75–84</td><td>8</td><td>C</td></tr>
<tr><td>85–94</td><td>9</td><td>B</td></tr>
<tr><td>95–100</td><td>10</td><td>A</td></tr>
<tr><td colspan="3">*oral exam after student successfully completes midterms</td></tr>
</table>
</td></tr>
<tr><td>Literature[2]:</td><td>Mandatory literature:
1. Kahrović, E. (2005). Anorganska hemija. Bemust.
2. Atkins, P., & Overton, T. (2010). Shriver and Atkins' inorganic chemistry. Oxford University Press, USA.
3. Kahrović, E., Ljubijankić, N. (2011). Praktikum anorganske hemije, Prirodno-matematički fakultet.
Supplementary literature:</td></tr>
</table>

[1]The grading structure for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught as per Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton

[2]The Senate of the higher education institution, as an institution, or the Council of the organizational unit of the higher education institution, as a public institution, determines by a special decision, which is published on its website before the beginning of the academic year obligatory, mandatory and recommended textbooks and manuals, as well as other recommended literature based on which exams are prepared and taken as per Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton

	1. Miessler, G. L. And Tarr, D. A. (1999). Inorganic Chemistry, Prentice-Hall. 2. Greenwood, N. N., & Earnshaw, A. (2012). Chemistry of the Elements. Elsevier.