Course ID: HTH351	**Course name: PRINCIPLES AND PROCESSES IN INDUSTRIAL CHEMISTRY**		
Cycle: (I) FIRST	**Year: (III) THIRD**	**Semester: V**	**ECTS credits: 5**
Course status: MANDATORY		**Total course hours: 75** Lectures: 45 Laboratory: 35	
Teaching participants:	**Teachers and associates with expertise in the field to which the subject belongs.**		
Prerequisite for enrollment:	-		
Course aims:	To provide students with basic knowledge of the most important principles and processes in industrial chemistry, which are not only the basis for mastering any technological process but are also crucial in designing the process of obtaining chemical products.		
Thematic course units:	1. Principles of mass exchange and transfer 2. Heat transfer 3. Shifting the balance of chemical-technological processes 4. Chemical reactors 5. Principles of homogeneous and heterogeneous processes and reactors 6. Catalytic processes 7. Enrichment of raw materials 8. Principles of electrochemical processes 9. Principles of purification and separation from different mixture 10. Interaction of solids with reactants in the gaseous and liquid phases		
Learning outcomes:	Students will be able to: - Gain knowledge of the most important principles and processes in industrial chemistry - Apply knowledge of the most important principles and processes in the design and production of chemical products		
Teaching methodology:	1) Method of verbal presentation		

<table>
<tr><td></td><td>2) Method of discussion
3) Research method
4) Exercise method - calculation</td></tr>
<tr><td>Assessment methods and grading system[1]:</td><td>
<table>
<tr><th colspan="3">Grading criteria</th></tr>
<tr><th>Criteria</th><th>Maximal score</th><th>Required score</th></tr>
<tr><td>1. Class attendance</td><td>5</td><td>3</td></tr>
<tr><td>2. Class activities</td><td>15</td><td>8</td></tr>
<tr><td>3. Midterms</td><td>40</td><td>22</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><th colspan="3">Scores and grading</th></tr>
<tr><th>Score</th><th>Grade (B&H)</th><th>Grade (ECTS)</th></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>
</table>
</td></tr>
<tr><td>Literature[2]:</td><td>Mandatory literature:
1. Ganić, E. Prijenos topline, mase i količine kretanja, Svjetlost, Sarajevo, 2005.
2. Neimarlija N,: Prijenos Toplote,Sarajevo,Oko,2005

Supplementary literature:
1. M. Baerns, A.Behr, A.Brehm, J. Gmehling, H. Hofmann, U. Onken, A. Renken: Technische Chemie, Wiley-VCH, Weinheim,2006
2. A.Behr, D.W.Ager, J.Jörissen: Einführung in die Technische Chemie; SpektrumAkademischer verlag,2010
3. Abulencia, P.J.&Theodore L. 2009, „Fluid flow for the Practicing Chemical Engineer“,John Wiley&Sons
4. R.Šećerov-Sokolović, Projektovanje tehnoloških procesa, Tehnološki fakultet, Novi Sad, 2000</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