



Course ID: HTH409	Course name: FLUIDS IN INDUSTRIAL CHEMISTRY		
Cycle: (I) FIRST	Year: IV (FOURTH)	Semester: VII	ECTS credits: 3
Course status: ELECTIVE		Total course hours: 45 Lectures: 30 Laboratory: 15	
Teaching participants:	Teachers and associates with expertise in the field to which the subject belongs.		
Prerequisite for enrollment:	-		
Course aims:	Introduction to fluid properties, movement and other characteristics of fluid in industrial chemistry.		
Thematic course units:	<ol style="list-style-type: none">1. Fluid movement2. Fluid fluid flow in pipes and channels3. Fluidless non-Newton fluids in pipes4. Pumping liquid5. Mixing liquid in thin6. Influence of the tougher fluid in the channels7. Flow measurement8. Movement of liquid in the presence of solid particles9. Introduction to the nonstationary current		
Learning outcomes:	The student will be able to: - apply knowledge of fluid movement, the flow of non-reliant		

	<p>fluids in pipes and channels in industrial chemistry - analyze liquid pumping and mixing liquid in thin - apply knowledge from flow measurement, and particle movements as well as knowledge of non-stationary streaming</p>																																													
Teaching methodology:	<p>1) Method of verbal exposure 2) Discussion method 3) Method of practical work</p>																																													
Assessment methods and grading system:	<table border="1"> <thead> <tr> <th colspan="3">Grading criteria</th> </tr> <tr> <th>Criteria</th> <th>Maximal score</th> <th>Required score</th> </tr> </thead> <tbody> <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> </tbody> </table>	Grading criteria			Criteria	Maximal score	Required score	1. Class attendance	5	3	2. Class activities	15	8	3. Midterms	40	22	4. Final exam	40	22	Total	100	55	Scores and grading			Score	Grade (B&H)	Grade (ECTS)	< 55	5	F, FX	55-64	6	E	65-74	7	D	75-84	8	C	85-94	9	B	95-100	10	A
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Literature:	<ol style="list-style-type: none"> 1. P.J. Abulencia, L. Theodore: Fluid flow for the Practicing Chemical Engineer, John Wiley&Sons, New Jersey, 2009. 2. P.J. Holland, R. Bragg: Fluid Flow for Chemical Engineers, Arnold, London, 1995. 																																													