C O U R S E G U I D E – s h o r t f o r m

Academic year 2021 - 2022

Course name[1]	**TECHNIQUES FOR SIMULATION OF THERMO-GAZ-DYNAMICS PROCESSES**					Discipline code		**TAIPM IA 105**		
Course type[2]	**DS**	Category[3]	**DI**	Year of study	1M	Semester	**1**	Number of credit points		**4**

Faculty	Material Science and Engineering	Number of teaching and learning hours[4]					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	TAIPM	**96**	**14**	**-**	**28**	**-**	**54**

Pre-requisites from the curriculum[5]	Compulsory	
	Recommended	

General objective [6]	Development of profesional and transversal competences in regard to apply numerical techniques to thermal-gaz-dynamics processes
Specific objectives[7]	- Development of integration capacity of knowledge based in regard to solve some complex technical issues specific to engineering area - Development of innovation capacity due to rapid change in the market - Development of auto-evaluation capaciyu in regard to successful integration in labor market - Defining concepts, theories and basic methods using CFD techniques - Usage of basic knowledge in numerical simulation of heat and mass transfer processes
Course description[8]	CFD simulation, mesh creation, boundary conditions

Assessment		Schedule[9]		Percentage of the final grade (minimum grade)[10]
A. Final assessment form [11] colloquium	Class tests along the semester	%	week	50 % (minimum 5)
	Home works	%		
	Other activities	10 %	week **14**	
	Examination procedures and conditions: 1. Subject with open questions, working conditions oral, percent 100 %; 2. -, working conditions -, percent %; 3. -, working conditions -, percent %	90 % (minimum 5)	week 14	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttvity during laboratory			50 % (minimum 5)
D. Project	Activity during project			% (minimum 5)
Course organizer	**prof.dr.habil.ing. Alina Adriana MINEA**			
Teaching assistants	**prof.dr.habil.ing. Alina Adriana MINEA**			

[1]Course name from the curriculum
[2] DF – fundamental, DD – in the field, DS – specialty, DC – complementary (from the curriculum)
[3] DI – imposed, DO –optional, DL – facultative (from the curriculum)
[4] Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)
[5] According to 4.1 – Pre-requisites - from the Course guide – extended form
[6] According to 7.1 from the Course guide – extended form
[7] According to 7.2 from the Course guide – extended form
[8] Short description of the course, according to point 8 from the Course guide – extended form

[9] For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period
[10] A minimum grade might be imposed for some assessment stages
[11] Exam or colloquium