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]	Special methods in obtaining casted parts					Course code		1TAIPMDA02	
Course type[2]	DA	Category[3]	DI	Year of study	1	Semester	1	Number of credit points	5

Faculty	Materials Science and Engineering	Number of teaching and learning hours[4]					
Field	Materials engineering	Total	L	T	LB	P	IS
Specialization	Advanced techniques regarding materials processing engineering	125	28		14		83

Pre-requisites from the curriculum[5]		
	Compulsory	not necessary
	Recommended	not necessary

General objective [6]	Course objectives are in accordance with those of the curriculum specialization - Advanced Technologies in Materials Processing Engineering – that aims to form a competent specialist in the field of obtaining materials by special casting methods.
Specific objectives[7]	• Understanding specific terms of evaluation criteria and the math in obtaining technologies. Special methods for casting materials. • Knowing the laws and fabrication technologies of parts obtained by special casting methods • Learning the principles of processing and characterization of special casted parts.
Course description[8]	Obtaining parts by special casting processes. Influence of cooling speed on alloy crystallization and solidification; Influence of the casting process on the quality of casted parts; Production of parts by pressure casting processes. Calculation of the main technological parameters of the Low Pressure Casting process. Production of parts by centrifugal casting. Technological design and centrifugal casting of some revolutionary parts. Production of casted parts in permanent metal shapes. The casting of parts for the medical technique.

Assesment			Sche-dule[9]	Percentage in the final grade (minimum grade)[10]
A. Final assessment form [11]: Exam	Class tests along the semester	%		50%
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Probe 1: Oral Examination. The Exam Question papers contains two questions, with a closed answer, equal weight.	100%	exam period	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttvity during laboratory			50%
D. Project	Activity during project			% (minimum 5)

Course organizer	Prof. dr. eng. Sergiu STANCIU	
Teaching assistants	Șef lucr.dr.ing. Mihai Axinte	

[1]Course name from the curriculum
[2] DF – fundamental, DID – 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