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

Academic year 2024 - 2025

Course name[1]	**FOUNDRY FORMING PROCESSES**					Discipline code		4 IPM 14	
Course type[2]	**DS**	Category[3]	**DO**	Year of study	4	Semester	**8**	Number of credit points	**5**

Faculty	Material Science and Engineering	Number of teaching and learning hours[4]					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	IPM	**125**	**28**	**-**	**-**	**28**	**69**

Pre-requisites from the curriculum[5]		
	Compulsory	-
	Recommended	-

General objective [6]	Forming the ability to apply basic principles and methods for solving well-defined problems / situations, typical of phenomena and physico-chemical processes that occur in the casting and solidification of cast metals and liquid alloys in molds, in conditions of qualified assistance promoting logical reasoning and applying the values of the ethics of the engineering profession in the responsible execution of tasks.
Specific objectives[7]	Establishing knowledge relationships between the theoretical disciplines studied and the professional areas approached such as: physics, chemistry, mechanics and technologies for obtaining and processing by casting alloys, with emphasis on the formation processes used in foundries. Knowledge, analysis, design and efficient and appropriate use of training procedures in tournaments.
Course description[8]	Casting processes; Casting in temporary forms; Mechanized training; Casting in shell shapes obtained with easily fusible patterns; Casting in forms obtained with self-reinforcing binders; Pouring into permanent forms; Gravitational casting in permanent forms; Pressure casting; Pressure casting at low / high pressure.

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	%	week	
	Examination procedures and conditions: 1. Subject with open questions, working conditions oral, percent 100 %; 2. -, working conditions -, percent %; 3. -, working conditions -, percent %	100 % (minimum 5)	week 14	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Activity during laboratory			% (minimum 5)
D. Project	Activity during project			50 % (minimum 5)
Course organizer	**Lecturer Ph.D. Eng. Manuela-Cristina PERJU**			
Teaching assistants	**Lecturer Ph.D. Eng. Manuela-Cristina PERJU**			

[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