

COURSE GUIDE – short form

Academic year 2021-2022

Course name ¹	MATERIALS TECHNOLOGY (1)					Course code	22EPI17DID		
Course type ²	DID	Category ³	DO	Year of study	2	Semester	3	Number of credit points	3

Faculty	Material Science and Engineering	Number of teaching and learning hours ⁴					
Field	Mechanical Engineering	Total	L	T	LB	P	IS
Specialization	Equipment for industrial processes	72	28		14		30

Pre-requisites from the curriculum ⁵	Compulsory	It is not necessary
	Recommended	It is not necessary

General objective ⁶	To introduce students to the main technologies of materials (analysis, synthesis, specific knowledge in materials technology) for the preparation of future specialist in the field of mechanical engineering. Applying concepts and experimental laboratory methods.
Specific objectives ⁷	Knowledge of properties and tests of metallic materials. Knowledge of materials development technologies, material processing by casting, plastic deformation and welding
Course description ⁸	I. Materials used in industry; II. Properties and testing of metallic materials; III. Fundamental elements on elaboration of metallic materials; IV. Fundamental elements on processing of metallic materials by casting. V. Fundamental elements on processing by plastic deformation of metallic materials. VI. Fundamental elements on welding materials processing; VII. Fundamental elements on cutting materials; VIII. Fundamental elements on materials processing by aggregation of powders. IX. Fundamental elements on protection and security work in process materials.

Assesment		Schedule ⁹	Percentage in the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	20%	70% (minimum 5)
	Home works	%	
	Other activities	%	
	Examination procedures and conditions: exam. oral Probe 1: theoretical question; open questions of course, working conditions: oral; percent of the final grade: 30%; Probe 2: theoretical question; open questions of course, working conditions: oral; percent of the final grade: 30%; Probe 3: theoretical question; open questions in the lab, working conditions: oral; percent of the final grade: 40%	50% (minimum 5)	
B. Seminar	Activity during seminar		% (minimum 5)
C. Laboratory	Activity during laboratory		30% (minimum 5)
D. Project	Activity during project		% (minimum 5)

Course organizer	Associate Professor, Ph.D. Anișoara CORĂBIERU
Teaching assistants	Associate Professor, Ph.D. Anișoara CORĂBIERU

¹Course 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

⁹For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

¹⁰A minimum grade might be imposed for some assessment stages

¹¹Exam or colloquium