

COURSE GUIDE – short form

Academic year 2021-2022

Course name ¹	PROPERTIES of MATERIALS 1					Course code	4.SM.02.DD		
Course type ²	DS	Category ³	DI	Year of study	4	Semester	1	Number of credit points	4

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	Materials Science	100	28	14	14	-	44

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	Physical Metallurgy, Metallic Materials Science and Engineering, Welding Metallurgy, Materials Strength, Machine Elements, Mechanics, Mathematical Analysis, Technical Drawing.

General objective ⁶	Evaluation and optimal solution of technical problems related to materials characterisation by applying concepts, theories and experimental methods.
Specific objectives ⁷	Knowing the properties of materials, focusing on metallic materials.
Course description ⁸	Clasification of properties; Elements of structural theory of materials properties; Physical properties; (density, electrical, thermal, magnetic properties, supraconductibility, combined physical effects); chemical properties (electrode potential, corrosion mechanisms and protection against corrosion).

Assesment		Schedule ⁹	Percentage in the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	%	50% (minimum 5)
	Home works	%	
	Other activities	%	
	Examination procedures and conditions: Probe 1: closed question; oral examination; 50% Probe 2: closed question; oral examination; 50%.	100% (minimum 5)	
B. Seminar	Activity during seminar – open questions - oral		25% (minimum 5)
C. Laboratory	Activity during laboratory – open and closed questions - oral, demonstration		25% (minimum 5)

Course organizer	Assoc. Prof. Ph.D. Eng. Gheorghe BĂDĂRĂU
Teaching assistants	Teach.Assist.Ph.D. Eng. Elena Ionela CHERECHEȘ

¹Course name from the curriculum

²DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

³DI – imposed, DO – optional, DL – facultative (from the curriculum)

⁴Points 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