

COURSE GUIDE ADVANCED CERAMIC MATERIALS – short form

Academic year 2017-2018

Course name ¹	ADVANCED CERAMIC MATERIALS					Course code	6MATAED I12		
Course type ²	DID	Category ³	DI	Year of study	II	Semester	III	Number of credit points	6

Faculty	Faculty of Materials Science and Engineering	Number of teaching and learning hours ⁴					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	Advanced Materials and Experimental Analyze Techniques	144	28	-	14	-	102

Pre-requisites from the curriculum ⁵	Compulsory	
	Recommended	Non-metallic materials, Special Metallic Materials Science

General objective ⁶	Assimilating theoretical and practical knowledge to students of methods of producing ceramic materials, characterization, properties and application areas.
Specific objectives ⁷	<ul style="list-style-type: none"> • Understanding the concept of advanced ceramic materials. • Characterization of the main advanced ceramic materials with applications in transports, electronics, tribology, cutting processes, nuclear electro-magnetic materials.
Course description ⁸	Ceramic materials. General. Classification. Advanced ceramic materials used to transport Advanced ceramic materials used in electronics Tribological properties of advanced ceramics Advanced ceramic materials used in the cutting process Advanced ceramic materials for nuclear techniques Advanced ceramic materials with electro-magnetic properties

Assessment		Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class test in the VII-th week of activity.	Week 1-14	10 %
	Activity during tutorials/laboratory works/projects/practical work	Week 1-14	30 % (minimum 5)
	Homework (A lecture will be given at the 14th week of the course)	Week 1-14	10 %
Final assessment	Final assessment form ¹¹	Week 14	50 % (minimum 5)
	Oral examination		
	One subject in the course topics; oral presentation and answers to course specialty questions, minimum 5.		

Course organizer	Assoc. Prof. phd. eng. Nicanor CIMPOEȘU
Teaching assistants	Assoc. Prof. phd. eng. Nicanor CIMPOEȘU

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

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