

COURSE GUIDE – short form

Academic year 2017-2018

Course name ¹	Thermal analysis advanced techniques (1)					Course code	5MATAE08		
Course type ²	DID	Category ³	DA	Year of study	I	Semester	II	Number of credit points	6

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴						
Field	Material Engineering	Total	L	T	LB	P	IS	
Specialization	Advanced materials and experimental analysis techniques	42	28		14			70

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

General objective ⁶	Description of the principles and methods of thermal analysis; highlighting the use of technical equipment for determining solid state transformations as a function on temperature. Using acquired knowledge to evaluate and optimal solving of the technical problems.
Specific objectives ⁷	Conveying of theoretical and practical knowledge necessary to use specific equipment, necessary to future specialists to adapt to the labour market dynamics.
Course description ⁸	<ol style="list-style-type: none"> 1. Introduction to thermal analysis 2. Characterization of measuring instruments 3. Characterization, interpretation and presentation of results 4. Differential thermal analysis 5. Differential scanning calorimetry 6. Dynamo mechanical analysis

Assessment		Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester	1	10%
	Activity during tutorials/laboratory works/projects/practical work	Week 1-14	40%
	Assignments Writing an essay		
Final assessment	Final assessment form ¹¹	Colloquium	50%
	Examination procedures and conditions: 1. theoretical question; open questions of course, working conditions: oral; percent of the final grade: 30% 2. theoretical question; open questions of course, working conditions: oral; percent of the final grade: 30% 3. theoretical question; open questions in the lab, working conditions: oral; percent of the final grade: 40%		

Course organizer	Lect. Ph.D. Eng, Nicoleta-Monica LOHAN	
Teaching assistants	Lect. Ph.D. Eng, Nicoleta-Monica LOHAN	

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