

COURSE GUIDE – short form

Academic year 2017 - 2018

Course name ¹	CONTROLLED ATMOSPHERE					Codul disciplinei		3IPM12	
Course type ²	DS	Category ³	DO	Year of study	3	Semester	6	Number of credit points	2

Faculty	Material Science and Engineering					Number of teaching and learning hours ⁴					
Field	Materials Engineering					Total	L	T	LB	P	IS
Specialization	IPM					42	28	-	14	-	

Pre-requisites from the curriculum ⁵	Compulsory	
	Recommended	Chemistry, Physics

General objective ⁶	Study controlled atmospheres used in heat treatment and thermochemical, as environmental protection and the environment with active components.
Specific objectives ⁷	Knowledge, analysis, design and efficient used and effective and appropriate use of heat treatments and thermochemical technologies used in machinery industry.
Course description ⁸	I. Classification and choice of heating media. II. Heat transfer in medium heat. III. Mass transfer. IV. Thermodynamic potential at heating environments. V. Gaseous medium for heating (controlled atmosphere). VI. Liquid medium for heating. VII. Solid medium for heating. VIII. Combinate medium. Heating in fluidized bed. IX. Special medium. Ion nitriding.

Assessment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester ²		week 6,12	20%
	Activity during tutorials/laboratory works/projects/practical work			25%
	Assignments-		week	5%
Final assessment	Final assessment form ¹¹	colloquium	week 14	50% (minimum 5)
	Examination procedures and conditions: 1. - ; tasks answer to closed questions; working conditions oral; percent 50 %; 2. - ; tasks answer to closed questions ; working conditions oral; percent 50 %; 3. - ; tasks- ; working conditions-; percent %;			

Course organizer	Lecturer Ph.D. Eng. Carmen NEJNERU	
Teaching assistants	Assist.Ph.D.Eng. Bălțatu Mădălina Simona	

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)

⁵According to 4.1 –Pre-requisites - from the Course guide – extended form

⁶According 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