

COURSE GUIDE – short form

Academic year 2017-2018

Course name	Metallic materials science and engineering (2)					Course code		1IPM11DID	
Course type	DID	Category	DI	Year of study	1	Semester	2	Number of credit points	5

Faculty	Materials Science and Engineering	Number of teaching and learning hours						
Field	Materials Engineering	Total	L	T	LB	P	IS	
Specialization	Equipment for industrial processing	42	28		14			

Pre-requisites from the curriculum	Compulsory	
	Recommended	

General objective	Making calculations, demonstrations and applications for solving materials engineering specific tasks based on knowledge in the field of materials science and engineering and other fundamental sciences and related to existing correlations between composition, structure, properties and uses of metallic materials.
Specific objectives	Recognition of materials using their properties and different methods of investigation. Materials selection depending on the application. Investigation of materials characteristics and properties. Developing skills for elaborating specific reports and scientific articles. Knowledge of materials processing technologies. Choosing processing technology according to the part/material requirements. Developing skills for elaborating specific reports and scientific articles.
Course description	Metallic materials. Ceramic materials. Notions regarding composite materials. Semiconductors. Notions regarding smart materials. Amorphous materials. Notions regarding some special destination metallic materials. Service behavior of the metallic materials.

Assessment		Schedule	Percentage of the final grade (minimum grade)
Continuous assessment	Class tests along the semester	Week 7	10%
	Activity during tutorials/laboratory works/projects/practical work		40%
	Assignments		-
Final assessment	Final assessment form	Examination	50%
	Examination procedures and conditions: 1. Category: theoretical; subject with open questions; conditions: oral; weight in final grade: 20%; 2. Category: theoretical; solving problem; conditions: oral; weight in final grade: 40%; 3. Category: theoretical; solving problem; conditions: oral; weight in final grade: 40%.		

Course organizer	Associate professor dr.eng. Ioan RUSU
Teaching assistants	Associate professor PH.D. eng. Ioan RUSU Lect. PH.D. eng. Năstăca TIMOFTE Assist. PH.D. eng. Alin CAZAC Assist. PH.D. eng. Elena MIHALACHE