

COURSE GUIDE – short form

Academic year 2017-2018

Course name	Processing of Cast Art Parts					Course code	4SM09DS		
Course type	DA	Category	DI	Year of study	I	Semester	I	Number of credit points	6

Faculty	Materials Science and Engineering	Number of teaching and learning hours						
Field	Materials Engineering	Total	L	T	LB	P	IS	
Specialization	Industrial safety engineering	144	28	-	14	-	102	

Pre-requisites from the curriculum	Compulsory	Chemistry; Physics
	Recommended	Casting Technologies

General objective	Application of the criteria and methods of fundamental assessment to identify, to modeling, analysis and assessment of qualitative and quantitative phenomena, as well as characteristic processes and theories, and to process and interpret the results of specific processes in order to obtain casting art parts.
Specific objectives	The discipline "Processing of Cast Art Parts" allows the student to develop skills on: - solving and explaining problems with average complexity specific to realization by casting techniques of works of art ; - acquiring the most advanced knowledge concerning the phenomena and processes occurring in the manufacture of casting art part; - identification of the solutions for harmonizing the aesthetic requirements with the technology.
Course description	Course: Chapter 1. Evolutionary milestones of recovery techniques of metals and alloys by casting; Chapter 2. Precision casting with easily fusible patterns; Chapter 3. Obtaining of jewelry by casting; Chapter 4. Obtaining the objects of worship through casting technique; Chapter 5. Techniques for obtaining bronze statues. Applications: 1. Notions of labor protection; 2. Establishment of specific technical parameters of art parts from alloys; 3. Setting the dimensions of the matrices used in execution of the easily fusible models. 4. Establishment of technological parameters of molding easily fusible patterns for case power supply through the thick section; 5. Sprocket production and realization of ceramic crusts; 6. Practical execution of a bell or a chandelier. 7. Recoveries.

Assessment		Schedule	Percentage of the final grade (minimum grade)
Continuous assessment	Class tests along the semester	-	-
	Activity during tutorials/laboratory works/projects/practical work	Week 1 - 14	30%
	Assignments: 1	Week 1 - 14	20 %
Final assessment	Final assessment form	Examination	50%
	Examination procedures and conditions: 1. exam tickets; task: subject 1; conditions: oral; weight in final grade: 50%; 2. exam tickets; task: subject 1; conditions: oral; weight in final grade: 50%;		

Course organizer	Professor dr.eng. Ioan Carcea
Teaching assistants	Professor dr.eng. Ioan Carcea