C O U R S E G U I D E – s h o r t f o r m

Academic year 2018 - 2019

Course name[1]	**Welding Metallurgy**					Course code		3SM10DS	
Course type[2]	DS	Category[3]	DO	Year of study	3	Semester	5	Number of credit points	4

Faculty	**Faculty of Materials Science and Engineering**	Number of teaching and learning hours[4]					
Field	**Materials engineering**	Total	L	T	LB	P	IS
Specialization	**Materials Science**	100	28		14		58

Pre-requisites from the curriculum[5]		
	Compulsory	
	Recommended	

General objective [6]	To develop students' abilities of analyzing/selecting/putting together phenomena in welding field.
Specific objectives[7]	• Understanding the changes that occur into material's properties secondary to welding. • Basic knowledge regarding discontinuities origin and the main possibilities of reducing their amount. • Some methods to emphasize weld quality.
Course description[8]	Weld, heat affected zone, add material, high rate solidification problems, induced fragility (through structural changes, chemical composition changes), Schaeffler diagram, discontinuities (cracks, pores, etc.), destructive /nondestructive tests, steel welding, aluminum welding, Copper, nickel welding.

Assesment			Sche-dule[9]	Percentage in the final grade(minimum grade)[10]
A. Final assessment form[11]: Colloquium	Class tests along the semester	40%	7th and 8th Week	50% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Probe 1: working conditions - ORAL, closed/open questions,; percent of the final grade 50%; Probe 2: Problem solving or selecting a technical solution; tasks: argue about the solution; working conditions oral; percent of the final grade 50%; Probe 3: working conditions; percent of the final grade %;	60% (mini-mum 5)		
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttvity during laboratory			50% (minimum 5)
D. Project	Activityduringproject			% (minimum 5)

Course organizer	Lecturer PhD Eng. Diana Antonia GHEORGHIU	
Teaching assistants	Lecturer PhD Eng. Diana Antonia GHEORGHIU	

[1]Course 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