

COURSE GUIDE – short form

Academic year 2014/2015

Course name ¹	Chemistry					Course code			
Course type ²	DF	Category ³	DI	Year of study	I	Semester	1	Number of credit points	3

Faculty	Mechanical Engineering	Number of teaching and learning hours ⁴						
Field	IA, IM, MCT și RBT	Total	L	T	LB	P	IS	
Specialization	All the specializations	72	28	-	14	-	30	

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	The acquiring of the chemistry skills for the knowledge and correct interpretation of the phenomena and chemical processes where with the future engineers get in contact
Specific objectives ⁷	The acquiring of some knowledge of thermochemistry, chemical kinetics and electrochemistry; lubricants, corrosion and anticorrosion protection, fuels, industrial water, pollution and environmental protection; very important issues for students training in mechanical perfection.
Course description ⁸	Chemical Thermodynamics; Chemical Equilibrium; Chemical Kinetics; Electrochemistry; Corrosion and the anticorrosion protection of metals; Lubricants and the theoretical basis of the lubrication; Physico-chemical characteristics and exploitation features of the lubricating oils; Macromolecular compounds: structural features, chemical, mechanical, thermal and electrical properties; Composite types: metallic, ceramic, polymeric, carbon-carbon; Industrial and waste waters: chemical composition, hardness, dedurization, demineralization, degassing.

Assessment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester		Week 7	15 %
	Activity during tutorials/laboratory works/projects/practical work		Weeks 1÷14	30 %
	Assignments		-	-
Final assessment	Final assessment form ¹¹	Exam	Examination session	55 %
	Examination procedures and conditions: Exam: written examination; access to exam is conditioned by the presence to the lab works and by the submission of the laboratory reports corresponding to all the practical works carried out			

Course organizer	Prof. PhD. Eng. Constantin Luca		
Teaching assistants	Lecturer Ph.D. Eng. Emil Ioan Muresan ; As. PhD. Eng. Ana Simona Barna		

¹Course name from the curriculum

²DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

³DI – 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