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]	**MECHANICS AND MECHANICAL VIBRATION**					Discipline code		**3 EPI 08**	
Course type[2]	**DD**	Category[3]	**DI**	Year of study	3	Semester	**6**	Number of credit points	**4**

Faculty	Material Science and Engineering	Number of teaching and learning hours[4]					
Field	Mechanical Engineering	Total	L	T	LB	P	IS
Specialization	EPI	**56**	**42**	**-**	**14**	**-**	

Pre-requisites from the curriculum[5]	Compulsory	
	Recommended	

General objective [6]	The discipline completes and develop knowledge obtained from fundamental disciplines: mechanical theoretical, mechanisms.
Specific objectives[7]	Acquiring knowledge and skills necessary for the calculation, design, implementation and operation and diagnosis of mechanical elastic actuated or disturbed vibrational
Course description[8]	Introduction - Generals on rigid solid. I. Statics of rigid body. Rigid body bounds. Rigid body equilibrium II. Rigid body dynamics. Calculation of dynamic parameters. The case of translational movement. III. Mechanical vibration - general considerations. Classification of mechanical vibrations. Characteristic elements of elastic systems. IV. Response at vibrations of mechanical systems. Off vibrations in linear systems with one degree of freedom. V. Methods and techniques for measuring and analyzing signal vibroacustical. VI. Vibroacustical control of mechanical systems. Vibration control. Control by noise. Control by acoustic intensity. VII. Active control of vibration and noise - general considerations. VIII. Vibroacustical diagnosis and monitoring of mechanical systems. IX. Isolation vibroacustical of mechanical systems. Acoustic inzolation

Assessment		Schedule[9]		Percentage of the final grade (minimum grade)[10]
A. Final assessment form [11]	Class tests along the semester	%	week	75 % (minimum 5)
	Home works	25 %		
	Other activities	%	week	
	Examination procedures and conditions: 1. Subject with open questions, working conditions oral, percent %; 2. -, working conditions -, percent %; 3. -, working conditions -, percent %	50 % (minimum 5)	week 14	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttvity during laboratory			25 % (minimum 5)
D. Project	Activity during project			% (minimum 5)
Course organizer	**Lecturer Ph.D. Eng. Carmen NEJNERU**			
Teaching assistants	**Assist.Ph.D.Eng. Bălțatu Mădălina Simona**			

[1]Course name from the curriculum

[2] DF – fundamental, DD – 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