

# COURSE GUIDE – short form

Academic year 2017 - 2018

Course name <sup>1</sup>	<b>PROPERTIES AND MATERIALS CHOICE</b>				Codul disciplinei	<b>4 SM 02</b>			
Course type <sup>2</sup>	<b>DID</b>	Category <sup>3</sup>	<b>DI</b>	Year of study	4	Semester	7	Number of credit points	<b>4</b>

Faculty	Material Science and Engineering	Number of teaching and learning hours <sup>4</sup>					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	SM	<b>96</b>	<b>28</b>	<b>14</b>	<b>14</b>	-	<b>40</b>

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	Physical Metallurgy, Metallic Materials Science and Engineering, Welding Metallurgy, Machine Elements
	Recommended	Mathematical Analysis, Physics, Technical Drawing, Materials Resistance

General objective <sup>6</sup>	Evaluation and optimum solutioning of technical problems linked with the characterisation of materials, by applying the concepts, theories and experimental methods.
Specific objectives <sup>7</sup>	Knowing the properties of materials, way of determination and practical use situations.
Course description <sup>8</sup>	Physical properties, density, electric conductivity and resistivity, superconductibility, thermal conductivity, specific heat, thermal dilatation, magnetic properties, photoconductibility, thermoelectromagnetic effects, chemical properties, static and dynamic mechanical properties (details concerning the methods of determination), technological properties and determination methods: splintering capability, quencing capability, welding capability, hot and cold deformability for metallic materials.

Assessment		Schedule <sup>9</sup>	Percentage of the final grade (minimum grade) <sup>10</sup>
Continuous assessment	Class tests along the semester -	week	%
	Activity during tutorials/laboratory works (open questions)	continuos	50 %
	Assignments -	week	%
Final assessment	Final assessment form <sup>11</sup>	exam	50 % (minimum 5)
	Examination procedures and conditions: 1. Subject with closed questions ; tasks answer to closed questions ; working conditions oral; percent 50 %; 2. Subject with closed questions ; tasks answer to closed questions ; working conditions oral; percent 50 %; 3. - ; tasks - ; working conditions -; percent %;		

Course organizer	<b>Assoc.Prof.Ph.D.Eng. Gheorghe Badarau</b>
Teaching assistants	<b>Assoc.Prof. Adrian Alexandru, Tech.Assist.Ph.D.Eng. Raluca Maria Florea</b>

<sup>1</sup>Course name from the curriculum

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

<sup>3</sup>DI – imposed, DO – optional, DL – facultative (from the curriculum)

<sup>4</sup>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)

<sup>5</sup>According to 4.1 – Pre-requisites - from the Course guide – extended form

<sup>6</sup>According to 7.1 from the Course guide – extended form

<sup>7</sup>According to 7.2 from the Course guide – extended form

<sup>8</sup>Short description of the course, according to point 8 from the Course guide – extended form

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<sup>9</sup> For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

<sup>10</sup> A minimum grade might be imposed for some assessment stages

<sup>11</sup> Exam or colloquium