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

Academic year 2017-2018

| Course name | **Metallic materials science and engineering (1)** | | | | | Course code | | 1IPM06DID | |
|---|---|---|---|---|---|---|---|---|---|
| Course type | DID | Category | DI | Year of study | 1 | Semester | 1 | Number of credit points | 4 |

| Faculty | Materials Science and Engineering | Number of teaching and learning hours | | | | | |
|---|---|---|---|---|---|---|---|
| Field | Materials Engineering | Total | L | T | LB | P | IS |
| Specialization | Engineering of Materials Processing | 42 | 28 | | 14 | | |

| Pre-requisites from the curriculum | Compulsory | |
|---|---|---|
| | Recommended | |

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|---|---|
| General objective | Making calculations, demonstrations and applications for solving materials engineering specific tasks based on knowledge in the field of materials science and engineering and other fundamental sciences and related to existing correlations between composition, structure, properties and uses of metallic materials. |
| Specific objectives | Recognition of materials using their properties and different methods of investigation.<br>Materials selection depending on the application.<br>Investigation of materials characteristics and properties.<br>Developing skills for elaborating specific reports and scientific articles. |
| Course description | Introduction. Atomic and molecular materials structure. Notions regarding material properties. Methods of structural analysis and nondestructive control of metallic materials. Notions regarding metallic materials processing. |

| Assessment | | | Schedule | Percentage of the final grade (minimum grade) |
|---|---|---|---|---|
| Continuous assessment | Class tests along the semester | | Week 7 | 10% |
| | Activity during tutorials/laboratory works/projects/practical work | | | 40% |
| | Assignments | | | - |
| Final assessment | Final assessment form | Examination | | 50% |
| | Examination procedures and conditions:<br>1. Category: theoretical; subject with open questions; conditions: oral; weight in final grade: 20%;<br>2. Category: theoretical; solving problem; conditions: oral; weight in final grade: 40%;<br>3. Category: theoretical; solving problem; conditions: oral; weight in final grade: 40%. | | | |

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| Course organizer | Associate professor PH.D. eng. Ioan RUSU | |
| Teaching assistants | Associate professor PH.D. eng. Maria BACIU | |