

COURSE GUIDE – short form

Academic year 2017 – 2018

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|--------------------------|-----------------|-----------------------|-----------|---------------|----------|-------------|-----------------|-------------------------|----------|
| Course name ¹ | PCLP (3) | | | | | Course code | 2IPM04DF | | |
| Course type ² | DF | Category ³ | DI | Year of study | 2 | Semester | 3 | Number of credit points | 3 |

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|----------------|-----------------------------------|--|-----------|---|-----------|---|----|
| Faculty | Materials Science and Engineering | Number of teaching and learning hours ⁴ | | | | | |
| Field | Materials engineering | Total | L | T | LB | P | IS |
| Specialization | Materials Processsing Engineering | 28 | 14 | | 14 | | |

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|---|-------------|---|
| Pre-requisites from the curriculum ⁵ | Compulsory | Use of Computer in Statistical Analysis |
| | Recommended | Mathematical Analysis, FORTRAN Language |

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| General objective ⁶ | Capacity of selection, analise, sintese and adequate use of specific knolidge for develop coherent scientific argues, efficient practical methods, decisions and concret solutions in this field. Use of basic knolige for explication of physics and chemical aspects for material science. |
| Specific objectives ⁷ | Students acquire theoretical and practical knowledge from courses and aplications, which allows them to correctly use the world libraries of performed programmes. Numerical Analysis should especially help students choose that software that best suits the problem they have to solve in the other subject matters from the curriculum. It is recomanded to use SPEE, SLATEC, IMSL and NAG software packagees. During the courses, the students will learn the basic theoretical notions on numerical methods used in the field of Materials Science and Engineering and during the laboratory courses the students will conduct practical experiments using the methods taught. Teaching is done by means of euristic conversation in order to engage the student in discussions on the methods used in numerical analysis. |
| Course description ⁸ | Chapter 1. Discret random variables. Chapter 2. Continous random variables. Chapter 3. Probability distributions and probability density functions. Chapter 4. Moment generating functions. Chapter 5. Simple linear regression and corelation. Chapter 6. Masurement scales. Chapter 7. Statistical inference. |

| Assessment | | Schedule ⁹ | Percentage of the final grade (minimum grade) ¹⁰ |
|-----------------------|--|-----------------------|---|
| Continuous assessment | Class tests along the semester | Weeks 1-14 | 10 % |
| | Activity during tutorials/laboratory works/projects/practical work | | 60 % |
| | Assignments | | 10 % |
| Final assessment | Final assessment form ¹¹ | Colloquium | 20 % |
| | Examination procedures and conditions: 1. Writing paper | | |

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| Course organizer | Lecturer PhD CONSTANTIN BORIS | |
| Teaching assistants | Lecturer PhD CONSTANTIN BORIS | |

¹Course 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