COURSE DESCRIPTION CARD - SYLLABUS

Course name
Transitional work I

Course

Field of study
Material Engineering

Year/Semester
3/6

Area of study (specialization)
-

Profile of study
general academic

Level of study
First-cycle studies

Course offered in
polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars
45

Number of credit points

3

Lecturers

Responsible for the course/lecturer:
dr hab. inż. Marek Nowak, prof. PP

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Wydział inżynierii materiałowej i fizyki technicznej

ul. Piotrowo 3 60-965 Poznań

Responsible for the course/lecturer:

Prerequisites

Basic knowledge of materials science, physics and chemistry, material processing technology. Logical thinking, exploring of various sources of knowledge. Understanding of necessity of learning and acquisition of new knowledge.

Course objective

Acquiring the ability to independently solve problems in the field of materials engineering

Course-related learning outcomes

Knowledge

1. The student broadens their knowledge in the field of materials production and research - [K_W08, K_W10, K_W11]

Skills

1. Students knows how to retrieve information from literature, databases and other properly selected sources in the area of materials engineering - [K_U01]

2. He/she knows how to prepare and deliver an oral presentation in Polish and English on detailed issues in materials engineering, in particular focussing on materials and manufacturing technologies and methods of materials investigation - [K_U04]

3. He/she knows how to carry out critical analysis of functioning and assess existing technical solutions in materials engineering, in particular with reference to materials, technologies, research methods, selection of materials - [K_U14].

Social competences

1. He/she knows how to prioritize steps in order to carry out a task either defined by him/herself or by others - [K_K04]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Projects: credit based on a positive evaluation of the transitional project

Programme content

Student solves engineering questions which can be either project. He reviews the literature on the problem, suggests ways to solve it. Performs projects work, necessary experiments, calculations. Develops the results of his work in writing, charts, tables, drawings. The result is a work - project, which the student presents in writing and presentation..

Teaching methods

Projects: seminars - discussions on the presented transitional papers. Consultation on issues related to the subject of the project. Obtaining a positive grade for the prepared final project.

Bibliography

Basic

1. Honczarenko J, Zygmunt M., Poradnik dyplomanta, WUPS, Szczecin, 2000

2. Dobrzański L.A., Materiały inżynierskie i projektowanie materiałowe: podstawy nauki o materiałach i metaloznawstwo, WNT, Warszawa, 2006

3. Ashby M.F., Dobór materiałów w projektowaniu inżynierskim, WNT 1998

Additional

1. Literature related to the subject matter of the study (textbooks, journals and other sources of content related to transient work)

Breakdown of average student's workload

	Hours	ECTS
Total workload	85	3,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	40	1,0

[1] delete or add other activities as appropriate