



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Processing and presentation of results [S1Lot2-BTL>PiPWB]

### Course

Field of study

Aviation

Year/Semester

3/6

Area of study (specialization)

Air Transport Safety

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

15

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

### Number of credit points

2,00

### Coordinators

dr inż. Maciej Siedlecki

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### Lecturers

### Prerequisites

Knowledge: The student has basic knowledge of mathematics and can use SI units. Skills: The student is able to use the basic computer programs used in the processing and presentation of results. Social competences: The student is able to work in a group and knows the rules of discussion.

### Course objective

The aim of the course is to familiarize the student with the rules of processing and presentation of scientific research results, to familiarize them with the correct form of data recording, the most important elements of the development of scientific results and their presentation.

### Course-related learning outcomes

Knowledge:

1. Student has knowledge about the way of presenting research results in a tabular and graph form, performing measurement uncertainty analysis [L1\_W10].
2. Student has basic knowledge about research methods and how to prepare and conduct scientific research, and knows the principles of editing a scientific paper [L1\_W13].

#### Skills:

1. Student is able to properly use the information and communication techniques applicable at various stages of aviation projects [L\_U02].
2. Student is able to prepare a short scientific paper, maintaining basic editorial principles. Student is able to choose the appropriate methods for the research and is able to perform a basic analysis of the results [L\_U19].

#### Social competences:

1. Student is aware of the importance of knowledge in solving engineering problems and knows examples and understands the reasons of malfunctioning engineering projects that led to serious financial, social losses or serious loss of health or even life [L\_K02].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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LECTURE: assessment of knowledge and skills on the written or oral test based on the explanation of selected issues

LABORATORY CLASSES: : assessment of knowledge and skills on the basis of reports from classes prepared by the student, optional assessment of students' knowledge before starting the classes

### Programme content

Presentation, public appearances, appearances in front of the camera and the transformation of destructive stress into constructive, the art of effective and precise communication, creativity, talking about complex things in an understandable way, personal development, lifelong learning. Effective problem solving in practice; case studies, presentation of results using the MS Office suite and programming tools, data acquisition and evaluation, the most important elements of graphs and presentations.

### Course topics

Self-presentation

Key elements of public speaking - how to do it effectively?

Explaining complex concepts in a clear and understandable way

Effective problem-solving in practice - formulating research problems and research questions Working with and analyzing sample research data

Presenting results using MS Office and programming

tools Data collection and analysis

Key elements of charts and presentations

### Teaching methods

Informative (conventional) lecture (transfer of information in a systematic way) - can be (propedeutical) or monographic (specialist)

Laboratory (experiment) method (students conduct experiments independently)

### Bibliography

Basic:

1. Pomiary wielkości fizycznych: opracowanie i prezentacja wyników. Zofia Kolek.

Wydawnictwo Uniwersytetu Ekonomicznego, Kraków 2009.

2. Pomiar i przetwarzanie wyników badań w pedagogice empirycznej. Janusz Gnitecki ; Uniwersytet im. Adama Mickiewicza w Poznaniu. Wydawnictwo Naukowe UAM 1992.

3. Komputer i pomiary: pomiary z użyciem Z-80 - nieskomplikowana analiza i przetwarzanie wyników / Hubert Joas ; z jęz. niem tł. Barbara Szatyńska. Wydawnictwa Komunikacji i Łączności 1990. Additional

1. [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)

2. Metodyka transformacji wyników badań naukowych do zastosowań praktycznych : raport. Andrzej H. Jasiński, Dominik Ludwicki, Studia i Materiały / Wydział Zarządzania. Uniwersytet Warszawski, Hours ECTS

Total workload 50 2,00

Classes requiring direct contact with the teacher 30 1,00

Student's own work (literature studies, preparation for laboratory classes/  
tutorials, preparation for tests/exam, project preparation) 20 1,00

Additional:

-

### Breakdown of average student's workload

|                                                                                                                                            | Hours | ECTS |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------|------|
| Total workload                                                                                                                             | 0     | 0,00 |
| Classes requiring direct contact with the teacher                                                                                          | 0     | 0,00 |
| Student's own work (literature studies, preparation for laboratory classes/<br>tutorials, preparation for tests/exam, project preparation) | 0     | 0,00 |