COURSE DESCRIPTION CARD - SYLLABUS

Course name
Air transport of dangerous goods [S1Lot2-BTL>PŁNwL]

Course

Field of study
Aviation

Year/Semester
4/7

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
0

Number of credit points

1,00

Coordinators

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Lecturers

Prerequisites

The student has basic knowledge of air transport, logistics, physics and chemistry. Has the ability to formulate questions precisely; the ability to determine priorities important in solving the tasks set. The student is able to integrate the obtained information, interpret it, draw conclusions, formulate and justify opinions; the ability to perceive, associate and interpret phenomena occurring in air transport management. The student is aware of the importance and understands non-technical aspects and effects of transport activities, including issues related to dangerous goods.

Course objective

Familiarizing students with the basic knowledge of dangerous goods, legal, national and international regulations regarding the transport of dangerous goods (e.g. IATA DGR), means of air transport, methods and techniques of their preparation for air transport, air transport itself, reloading and storage

Course-related learning outcomes

Knowledge:
1. has structured, theoretically based general knowledge in the field of technology and various means of air transport, about the life cycle of means of transport, both hardware and software, and in particular about the

2. the student has knowledge in the field of safety and management in aviation. The student knows the concept of the human factor and methods of assessing human reliability, has detailed knowledge related to selected issues in the field of human capabilities and limitations during aircraft operation in flight, its impact on health and ability to perform flight operations, as well as possibilities of improving physical condition

Skills:
1. is able to assess - at least to a basic extent - various aspects of risk associated with a logistics undertaking in air transport

Social competences:
1. is aware of the importance of knowledge in solving engineering problems and knows examples and understands the causes of malfunctioning engineering projects that led to serious financial and social losses or to serious loss of health or even life
2. is able to think and act in an entrepreneurial manner, including: finding commercial applications for the system being created, taking into account not only the business benefits but also the social benefits of the business activity

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

LECTURE: Assessment of knowledge in a written or oral exam based on explanation of selected issues
EXERCISES: Assessment of knowledge and skills in a written exam based on solved tasks

Programme content

Introduction to the subject of dangerous goods transport in aviation. International rules and regulations concerning the transport of dangerous goods. Classification of dangerous goods. Loading and unloading procedures for dangerous goods. Safety and security measures in the transport of dangerous goods. Documentation related to the transport of dangerous goods. Crisis management and emergency procedures in the event of accidents involving dangerous goods. Principles and technologies of control of dangerous goods. International cooperation and international regulations.

Course topics

Introduction, sources of law in the field of transport of dangerous goods. Cargo - introduction to the subject: cargo and goods, basic types of cargo, including dangerous goods, transport susceptibility of cargo, exposure of cargo, risk of damage, sensitivity to impact, basic methods of cargo classification. Definition of dangerous goods in aviation and their impact on flight safety. Cargo units: definition and essence of cargo units, tasks of cargo units and means, auxiliary means of preparing cargo units - classification, types of cargo units and a detailed discussion of individual types of cargo units used in air transport. Marking of cargo units / packages and their identification: definition and legal basis, basic types of signs and their form,
marking of cargo units (including especially dangerous goods).

Teaching methods

Informative (conventional) lecture (transmission of information in a systematic way) - may be of a course (propaedeutic) or monographic (specialist) nature
Exercise method (subject-specific exercises, practice)

Bibliography

Basic:
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Additional:
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Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,50