



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

logistics in aviation

### Course

Field of study

Aviation and cosmonautics

Area of study (specialization)

-

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3/5

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

### Number of hours

Lecture

60

Laboratory classes

0

Other (e.g. online)

0

Tutorials

30

Projects/seminars

0

### Number of credit points

7

### Lecturers

Responsible for the course/lecturer:

dr inż. Anna Kobaszyńska-Twardowska

Responsible for the course/lecturer:

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Wydział Inżynierii Lądowej i Transportu

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### Prerequisites

The knowledge acquired during the implementation of the basics of logistics. Basic information on transport, its organization and functioning. Ability to apply methods in solving logistic problems and reasoning.

### Course objective

Expanding knowledge in the field of air transport logistics. Preparation for work in Polish and international corporations in the aviation industry, logistics teams at airports and domestic and international airports, domestic and international airlines (passenger and cargo), as ground, on-board and service personnel, companies producing and operating unmanned aerial vehicle systems (UAS), logistics centers.



### Course-related learning outcomes

#### Knowledge

1. Student has extended knowledge necessary to understand the profile subjects as well as specialist knowledge about the operation and management of air traffic, safety systems, economic, social and environmental impact in the field of aviation and space
2. Student has detailed knowledge related to selected issues in the field of ground handling of aircraft, including logistic aspects
3. Student has detailed and structured knowledge in the field of the use of air technical facilities for the transport of passengers, goods, dangerous goods, as well as in the management of air operations and airports
4. Student has basic knowledge necessary to understand social, economic, legal and other non-technical conditions of engineering activity

#### Skills

1. Student can use the following languages: native and international to a degree enabling the understanding of technical texts and writing technical descriptions of machines in the field of aviation and aerospace using dictionaries (knowledge of technical terminology)
2. Student can use one additional foreign language in verbal communication at the level of everyday language, can describe in this language issues related to the field of study, can prepare technical descriptive and drawing documentation of an engineering, transport and / or logistic task
3. Student can use the language of mathematics (differential and integral calculus) to describe simple engineering problems
4. Student is able to estimate various types of costs, is able to verify and assess market phenomena, is able to assess the factors of economic growth and the importance of money for its development, can decide about economic choices in the field of consumption and production]

#### Social competences

1. Student understands the need for lifelong learning; can inspire and organize the learning process of other people
2. Student is ready to critically evaluate his knowledge and received content, recognize the importance of knowledge in solving cognitive and practical problems and consult experts in the event of difficulties with solving the problem on his own
3. Student can interact and work in a group, assuming different roles in it
4. Student is aware of the social role of a technical university graduate, and especially understands the need to formulate and transmit to the society, in particular through the mass media, information and opinions on the achievements of technology and other aspects of engineering activities; makes efforts to provide such information and opinions in a generally comprehensible manner



### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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

TUTORIALS: Assessment of knowledge and skills on the written test on the basis of solved tasks

### Programme content

1. Air transport as a functional sphere: Basic concepts and general conditions of the branch functioning, Development outline, Selected problems of the functioning of modern air transport.
2. Air transport means of work: Communication planes, Air transport infrastructure
3. Organization of air transport
4. Handling as an element of logistic customer service
5. Air services market: General characteristics and functioning, Demand and supply, Costs and prices
6. Forecasting the demand for logistics services
7. Assessment of the quality of demand forecasts
8. Air transport companies: Airline companies as economic entities, Traditional and low-cost carriers, Airports, Handling agent, Air traffic management
9. Inventory management in aviation companies
10. Methods of replenishing stocks in aviation
11. Competition and cooperation in air transport: The essence and forms of competition, Rules and conditions of competition, Intra-industry competition, Intra-industry competition, Integration of air transport with selected modes of transport (Rail transport in the service of selected airports, Public bus transport in the service of Polish airports, Cooperation of shipping and air transport), Cooperation in the market - commercial consolidations, alliances, acquisitions and mergers
12. Air services market research: Market and marketing research - goals, types, scope, Market segmentation, Market information and decision making in air transport companies
13. Marketing mix instruments on the aviation services market: Air service, Price and distribution of air services (Low-cost carrier pricing strategy including marketing), Promotion of air services, Staff
14. Transport policy and air transport: Policy of "open sky", Policy of shaping the aviation infrastructure in Poland, Selected problems of European airspace management, Prospects for the development of branches and the market

### Teaching methods



Informative (conventional) lecture (providing information in a structured way) - may be of a course (introductory) or monographic (specialist) character

The exercise method (subject exercises, practice exercises) - in the form of auditorium exercises (application of the acquired knowledge in practice - may take various forms: solving cognitive tasks or training psychomotor skills; transforming a conscious activity into a habit by repeating

### Bibliography

#### Basic

1. Rucińska D., Ruciński A., Tłoczyński D. Transport lotniczy. Ekonomia i organizacja. Wydawnictwo Uniwersytetu Gdańskiego, 2012
2. Gołemska E., Kompendium wiedzy o logistyce, PWN Warszawa 2017.
3. Beier F.J., Rutkowski K.: Logistyka. SGH, Warszawa 1993.
4. Coyle J., Bardi E., Langley C.: Zarządzanie Logistyczne. PWE, Warszawa 2007

#### Additional

1. Rucińska D., Ruciński A., Tłoczyński D. Transport lotniczy. Ekonomia i organizacja. Wydawnictwo Uniwersytetu Gdańskiego, 2012
2. Gołemska E., Kompendium wiedzy o logistyce, PWN Warszawa 2017.
3. Beier F.J., Rutkowski K.: Logistyka. SGH, Warszawa 1993.
4. Coyle J., Bardi E., Langley C.: Zarządzanie Logistyczne. PWE, Warszawa 2007

### Breakdown of average student's workload

	Hours	ECTS
Total workload	175	7,0
Classes requiring direct contact with the teacher	135	5,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	40	2,0

<sup>1</sup> delete or add other activities as appropriate