



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Aviation Adverse Events Investigation

Course

Field of study	Year/Semester
Aerospace Engineering	3/6
Area of study (specialization)	Profile of study
Safety and Management of Aviation	
Level of study	Course offered in
First cycle studies	polish
Form of study	Requirements
full-time	compulsory

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
15	0	0
Tutorials	Projects/seminars	
15	0	

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

Zbigniew Drozdowski

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Responsible for the course/lecturer:

Prerequisites

Knowledge:

The student understands the risk management process. The student knows how to identify sources of threats and formulate threats. The student has a general knowledge of the risk and risk assessment methods of threats and security systems.

The student knows the basics of mathematics, with particular emphasis on the theory of probability

Skills:

The student is able to recognize the sources / factors of threats with forward and backward methods. Has the ability to formulate threats. The student is fluent in a suite of office computer programs.

The student is able to analyze complex processes: identify and describe their component parts.



Social competence:

The student understands and accepts the need to introduce appropriate limitations to social, transport and industrial systems, which may lead to the improvement of the safety of these systems. The student is able to manage the time available to perform the tasks indicated for the implementation. The student is able to determine the priorities important in solving the tasks set before him. The student shows independence in solving problems, acquiring and improving the acquired knowledge and skills.

Course objective

Getting to know the goals, elements and structure of the state's internal security system.
Getting to know the procedures and acquiring practical skills in the field of applying risk management in areas related to aviation incidents.

Course-related learning outcomes

Knowledge

1. The student has ordered and theoretically founded general knowledge covering key issues in the field of internal security of the state.
2. In the field of administrative preparation of air accident investigation, the student knows (at a basic level): the applicable national legislation and international agreements, the structure of state aviation accident investigation bodies, instructions and procedures for investigating air accidents, accident definitions and classification of accidents.
3. In the field of air accident investigation procedures, the student should have basic knowledge of: notification to national institutions and organizations, methods and techniques of securing documents, recordings and samples, jurisdiction of the accident site, safety rules applicable during the investigation of the accident, ethics and proper behavior on the spot events, threats resulting from psychological stress.

Skills

1. The student should be able to pre-define the size and scope of an air accident investigation and apply the applicable principles of the investigation management. The student has the ability to plan the needs of the implementation of procedures by specialists.
2. The student is able to obtain information taken from: literature, the Internet, databases and other sources. He can integrate the obtained information, interpret it and draw conclusions related to the internal security of the state, occupational risk management and aviation incident investigation.
3. The student is able to obtain information from literature, the Internet, databases and other sources. Can integrate the obtained information, interpret and draw conclusions from it, and create and justify opinions



Social competences

1. The student is aware of the importance and understands the non-technical aspects and effects of engineering activities, including its impact on the environment, and the responsibility for the decisions made.
2. The student is aware of the importance of information made available to the media. Is aware of the need to observe appropriate ethical principles in contacts with the family / families of participants in air accidents.
3. The student is able to interact and work in a group, assuming various roles in it.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Written exam in a test form

Programme content

Introduction to the subject matter. Program, hour structure, literature, course of credit.

Basic concepts

Legal aspects of safety investigation - sources of aviation law; EU rules and national rules on civil aviation. History of research into aviation accidents in the Republic of Poland. Procedures - reporting accidents

Teaching methods

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

The exercise method (subject exercises, exercises) - in the form of auditorium exercises (the use of acquired knowledge in practice - can take a different nature: solving cognitive tasks or training psychomotor skills; transforming conscious activity into a habit through repetition).

Bibliography

Basic

1. Konstytucja Rzeczypospolitej Polskiej z dnia 2 kwietnia 1997 r.
2. Biała Księga Bezpieczeństwa Narodowego RP z 2013 r.
3. Strategia Bezpieczeństwa Narodowego z 2014 r.
4. Ściborek Z, Wiśniewski B., Kuc R.B., Dawidczyk A., Bezpieczeństwo wewnętrzne. Podręcznik akademicki, Toruń, 2017.
5. Drozdowski Z. (red.), Organizacja i metodyka badania wypadków lotniczych w lotnictwie państwowym i lotnictwie cywilnym. Wyd. ITWL, Warszawa, 2005.



6. Instrukcja badania wypadków i incydentów. Zasady i procedury. Opracowanie na podstawie publikacji ICAO Doc. 9962, wyd. 2017, PKBWL, Warszawa, 2017.

7. Klich E., Bezpieczeństwo lotów. Wyd. Instytutu Technologii Eksploatacji, Radom, 2011.

8. Milkiewicz A. (red.), Podstawy organizacji i metodyki badania wypadków lotniczych w lotnictwie cywilnym RP. Główny Inspektorat Lotnictwa Cywilnego, Zespołu Bezpieczeństwa Lotów, wyd. 3, Warszawa, 2001.

9. Podręcznik zarządzania bezpieczeństwem. ICAO, wyd. 2, 2009.

Additional

1. Sienkiewicz-Małyjurek K., Niczyporuk Z. T., Bezpieczeństwo publiczne. Zarys problematyki. Wyd. Politechniki Śląskiej, Gliwice, 2011.

2. Jancelewicz B. (red.), Bezpieczeństwo i niezawodność w lotnictwie. Wyd. Adam Marszałek, Toruń, 2009.

3. Makarowski R., Smolicz T., Czynniki ludzkie w operacjach lotniczych. ADRIANA AVIATION, Kosowizna, 2012.

4. Rozporządzenie Parlamentu Europejskiego i Rady (UE) nr 376/2014 – 03.04.2014 r. (zgłaszanie i analiza zdarzeń).

Breakdown of average student's workload

	Hours	ECTS
Total workload	60	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) ¹	30	1,0

¹ delete or add other activities as appropriate