COURSE DESCRIPTION CARD - SYLLABUS

Course name
Safety in transport

Course

Field of study
Safety Engineering
Area of study (specialization)
Safety and crisis management
Level of study
Second-cycle studies
Form of study
full-time

Year/Semester
2/3
Profile of study
general academic
Course offered in
Polish
Requirements
elective

Number of hours

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

Number of credit points

3

Lecturers

Responsible for the course/lecturer:
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Responsible for the course/lecturer:

Prerequisites

The student has a basic knowledge of issues related to the transport and safety in transport. The

student has the ability to acquire information from specified sources and is ready to actively search, systematize and present knowledge in the field of transport safety.

Course objective

Systematising basic knowledge related to safety issues in transport. Showing the specifics of safety in transport, its condition, legal norms, activities of services and institutions responsible for safety in this area, as well as created procedures and applied actions to improve safety in transport. Developing skills to solve problems occurring during the preparation and implementation of tasks related to transport safety.

Course-related learning outcomes

Knowledge

1. A student knows the issues of risk analysis, threats and their effects related to the functioning of individual types of transport, and knows the issues of safety management systems in individual types of transport [P7S_WG_05],

Skills

1. A student knows how to correctly select sources and information derived from them, making the assessment, critical analysis and synthesize of this information, formulate conclusions and comprehensively justify the opinion [P7S_UW_01],

2. A student is able to see and formulate systemic and non-technical as well as socio-technical, organizational and economic aspects in engineering tasks [P7S_UW_03],

3. A student can prepare a well documented development of problems in the field of transport safety management [P7S_UK_02],

4. A student is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and based on them determine the needs to supplement own and other knowledge [P7S_UU_01],

Social competences

1. A student is aware of the recognition of cause-and-effect relationships in achieving the set goals and ranking the significance of alternative or competitive tasks [P7S_KK_01],

2. A student is aware of the recognition of the importance of knowledge in solving problems in the field of safety engineering and continuous improvement [P7S_KK_02],

3. A student is aware of responsibility for own work and readiness to comply with the principles of teamwork and taking responsibility for jointly implemented tasks [P7S_KR_02].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:
Formative assessment:

a) tutorials: current assessment (on a scale of 2 to 5) of the tasks assigned,
b) projects: ongoing assessment of the progress of work on the selected project,
c) lectures: presence and activity on lectures (partial points).

Summative rating:

a) tutorials: average of partial tasks; credit after passing at least 3.0,
b) projects: average of partial tasks and assessment of the submitted project; credit after passing at least 3.0,
c) lectures: test carried out during the last lectures. The test consists of 15 to 20 questions (test and / or open), variously scored. Passing threshold: 55% of points; partial points may increase the final grade.

Programme content

Lecture:

General characteristics of transport and its types. Road transport - legal regulations, statistics, organization and functioning of entities responsible for safety. Rail transport - legal regulations, statistics, organization and functioning of entities responsible for safety. Maritime and inland sailing transport - legal regulations, statistics, organization and functioning of entities responsible for safety. Air transport - legal regulations, statistics, organization and functioning of entities responsible for safety. Internal transport - legal regulations, statistics, organization and functioning of entities responsible for safety. Transport of dangerous goods. Aspects of transport safety in national security systems.

Tutorial:

Analysis of legal regulations and scope of competences of basic transport safety systems. Analysis of hazards in different types of transport. Risk estimation in particular types of transport. Rules of conduct in the event of adverse events occurring in individual types of transport and tasks of entities. Safety management systems in different types of transport. Methods for assessing preparedness for emergency situations. Transport of dangerous goods.

Project classes:

Analysis of a selected contemporary transport accident consisting of the preparation of factual data, conducting an analysis using, among others taxonomy of the causes of adverse events in a given mode of transport and presentation of the implementation of post-event safety recommendations and assessment of their effectiveness together with own suggestions for recommendations.

Teaching methods

Lecture: multimedia presentation, illustrated with examples on the board.

Tutorial: multimedia presentation, illustrated with examples given on a board, which are the basis for performing the tasks given by the lecturer. During classes, the classical problem method, case method and practice method are used.

Project classes: multimedia presentation, illustrated with examples given on a board, which are the basis for performing the tasks given by the lecturer. During classes, a practical method is used.

Bibliography

Basic

1. (collective work edited by R. Krystek) (2009), Integrated transport safety system, collective work, vol. I, WKŁ, Gdańsk University of Technology.
2. (collective work edited by R. Krystek) (2009), Integrated transport safety system, collective work, vol. II, WKŁ, Gdańsk University of Technology,
3. Gałusza M., Wojciechowska-Piskorska H., Uzarczyk A., (2011), OHS in transport - a guidebook, Publisher TARBONUS Sp. z o. o., Kraków-Tarnobrzeg.
4. Legal regulations regarding the issues discussed.

Additional

1. Klich E. (2010), Flight safety in air transport, Institute of Sustainable Technologies, Radom.
2. Grzegorczyk K., Buchar R .: Dangerous goods. Transport in practice. ADR 2011-2013 ed. Net Poland. Warsaw 2011.
3. Ewertowski T., Bienias M., Czerniak K., (2019), Preparation of an enterprise for emergency situations and their better communication, Informatyka Ekonomiczna - 2019, nr 3(53), s. 9-22
4.Ewertowski T., Błaszak D., (2018), Analiza procesów transportu wewnętrznego i magazynowania w aspekcie bezpieczeństwa w wybranym przedsiębiorstwie produkcyjnym, Systemy Logistyczne Wojsk - 2018, nr 49, s. 83-100

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for tutorials, preparation for tests, project preparation) [1]	30	1,0

[1] delete or add other activities as appropriate