



SYLLABUS OF THE SUBJECT

«Air Transportation Engineering»

Educational and Professional Program: «Air Transportation Management»

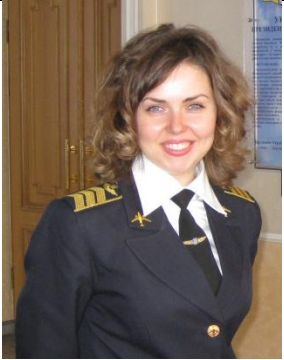
Field of study: 27 «Transport»

Speciality: 275 «Air Transport Technologies»

Specialization: 275.04 «Air Transport Technologies»

Higher Education Degree	Second (Master)
Subject status	Academic subject of the mandatory component of the study program
Course of study	1
Semester	2
Subject volume, ECTS credits / total amount of hours	4.0/120
Language	Ukrainian, English
To be studied (study subject)	The subject is theoretical basis of knowledge and skills for mastering technological subjects of specialists training in the field of transportation management and transport systems.
Why is it interesting and must be learned? (purpose)	The purpose of teaching this subject is to form a system of scientific knowledge and practical skills of specialists in transport technology in the field of air transportation engineering.
What is studied? (learning results)	– to develop technologies of cargo and passenger transportation by different types of transport on the basis of researches and relevant data; – to investigate theoretical and experimental models for assessing the reliability and efficiency of transport technologies by the mode of transport; – to apply problem-oriented methods of analysis, synthesis and optimization of computer-integrated information management systems for air transport complexes; – to present the results of research activities, to prepare scientific publications, to participate in scientific discussions at scientific conferences, symposia as well as carry out pedagogical activities in educational institutions.
How is it possible to use the gained knowledge and skills? (competencies)	– ability to search, process and analyze information from various sources; – ability to develop and manage projects; – ability to conduct research at the appropriate level; – ability to conduct research within a narrow specialization, identify problems, set goals and solve them using appropriate research methods; – ability to investigate and manage the operation of transport systems and technologies; – ability to determination and application of perspective areas of transport processes modeling; – ability to manage traffic flows; – ability to use knowledge of the regulations, determining functioning of the air transport industry, laws and principles of complicated systems operation in combination with necessary mathematical tools to describe the functioning and development of air transport technologies.

Academic logistics	Subject program: Module №1 «Basic requirements to aircraft ground handling and management of material and technical provision of air transportation» Topic 1. Basic requirements to air transportation ground handling management. Topic 2. Aircraft ground handling procedures. Topic 3. Peculiarities of aircraft maintenance and repair system designing. Topic 4. Fundamentals of aircraft maintenance and repair system designing. Topic 5. Management of air transportation logistical support processes. Topic 6. Logistical support of the processes of aircraft provision with spare parts. Modern technologies of integrated logistics support in civil aviation. Topic 7. Usage of CALS technologies during Ground Support Equipment operation. Organizational and economic problems of CALS-technologies implementation in the aircraft construction complex of Ukraine. Тема 8. Provision of ecological safety in civil aviation. Human factor in civil aviation. <u>Kinds of sessions:</u> lectures, laboratory classes <u>Teaching methods:</u> explanatory-illustrative method; problem statement method; reproductive method; research method <u>Modes of study:</u> full-time
Prerequisites	The subject is based on the following subjects “Project Management in Transport Field”, “Management in Integrated Transport Systems”
Post-requisites	The subject is base for studying the following subjects: “Major-related Training”, “Unified State Qualification Exam”, “Qualification work”.
Information support from the fund and repository of NAU library	1. IATA Airport Handling Manual, current edition. – Montreal–Geneva. 2. Експлуатація авіаційної техніки. Дмитрієв С.О., Тугарінов О.С., Докучаєв В.Г., Молодцов М.Ф. Навчальний посібник. Вид-во Нац. авіац. ун-ту «НАУ-друк», 2017. – 221 с. 3. Людський фактор в системі збереження льотної придатності авіаційної техніки: навч. посіб. / Бурлаков В.І., Пучков Ю.П., Попов О.В., Попов Д.В. – К. : НАУ, 2014. – 118 с 4. Григорак М.Ю., Марчук В.Є., Косарєв О.Й., Калініченко В.І., Реміга Ю.С. Логістичний інжиніринг. Навчальний посібник. [Текст]/ М.Ю. Григорак, В.Є. Марчук та ін. – К.: НАУ, 2015. – 325 с. 5. Taylor G.D. Logistics Engineering Handbook [Електронний ресурс]. – www.gbv.de/dms/ilmenau/toc/534350054.PDF. 6. Аксьонов І. М., Габа В. В., Шерепа К.М. Транспортна логістика: навчальний посібник – Київ: ДЕТУТ, 2015. 7. Марінцева. К. В. Наукові основи та методи забезпечення ефективного функціонування авіатранспортних систем [Текст]: монографія/ Марінцева К. В.. – Київ: НАУ, 2017. – 503 с. Internet resources: 1. https://web.archive.org/web/20110402011307/http://users.rcn.com/hwbingham/tables/calstbhs.htm 2. http://cals.ru/sites/default/files/downloads/national/apl-to-s3000l-intro.ppt 3. https://www.iata.org/publications/Documents/ahm37-toc-20161125.pdf
Location and logistics	Classroom of theoretical training, laptop, mobile device (phone, tablet) with Internet connection for: communication and surveys; homework; performing tasks of independent work; testing (current, boundary, final control).
Semester control, examination techniques	Examination, Computing and Schematic Paper, Testing
Department	Air Transportation Management Department
Faculty	Faculty of Transport, Management and Logistics

Lecturer(s)		IVANNIKOVA VIKTORIIA YURIIVNA Position: Associate Professor Scientific Degree: PhD in Transport Engineering Academic Status: Associate Professor Teacher profile: https://scholar.google.com/citations?user=VdBMMeMgA AAAJ&hl=uk Тел.: 044 406-70-94 E-mail: viktoriiia.ivannikova@npp.nau.edu.ua Location: 2.102
Originality of the subject	Author's course, teaching in English	
Link to the subject	https://er.nau.edu.ua/handle/NAU/34200	