




Syllabus of discipline
"HUMAN FACTOR IN AVIATION"
 Specialty: 134 Aviation and Rocket-Space
 Engineering
 Field of study: 13 Mechanical Engineering



Higher Education Degree	First (Bachelor)
Discipline status	Academic discipline of the selective component of the professional cycle
Semester	Spring
Discipline volume, ECTS credits/total amount of hours	4/120
Language	English
To be studied (study subject)	Understand the nature of Human Error. Identify and predict potential maintenance Human Error. Reduce human error working under the stress and fatigue. Identify strategies for reducing or controlling maintenance Human Error. Adopt a credible, non-punitive policy toward human error (not violations). Demonstrate a commitment to taking action to reduce error-inducing conditions. Provide training in Threat & Error Management strategies for individuals and maintenance teams. Identify threats and deal with them before they become errors. Assist in assessing current and proposed maintenance policies and procedures. Conduct investigations for individuals involved mishaps or other incidents. Develop effective risk management practices.
Why is it interesting and must be learned? (purpose)	Human Factors covers the aspects of psychology, performance, and communications which are important for individuals and teams working in aeronautical design, certification, training, operations and maintenance environment. You will learn by understanding concepts, not just rote memorization and you will learn how and why the consideration of human nature contributes to accident prevention as well as safety and efficiency
What is studied? (learning results)	The course is designed to support a detailed understanding of the human activity and the individuals interface with the workplace. To explore the implications of Human Factor and Organization Induced Error. To consider the role of process & procedures and to consider safety policy and methods of communication.
How is it possible to use the gained knowledge and skills? (competencies)	The Course is specifically designed to accommodate the specific needs of the Component Certifying Staff who are required to show compliance with the requirements of EASA Part 66.
Academic logistics	Course content: Introduction to the human factor. Human Performance and Limitations. Social Psychology. Factors Affecting Performance. Physical Environment. Tasks. Communication. Human Error. Hazards in the Workplace Kind of lessons: lectures, practical classes. Education methods: educational discussion, online. Mode of study: full-time
Prerequisites	General and professional knowledge in the field of aviation, obtained at the first (bachelor's) level of higher education.

Post-requisites?	Knowledge of the discipline can be used in human activity and the individuals interface with the workplace in aeronautical design, certification, training, operations and maintenance environment
Information support from the fund and repository of NAU library	NAU library: <ol style="list-style-type: none"> 1. The Operator's Manual for Human Factors in Maintenance and Ground Operations 2. Hobbs, An Overview of Human Factors in Aviation Maintenance, Canberra City: Australian Transport Safety Bureau (2008) 3. NOPSEMA, Human error risk reduction to ALARP, Perth: National Offshore Petroleum Safety and Environmental Management Authority (2015) Репозитарій НАУ: https://er.nau.edu.ua/handle/NAU/31759
Location and logistics	11.126, projector, computer room
Semester control, examination techniques	module tests
Department	Department of Aircraft Structure
Faculty	Aerospace Faculty
Lecturer(s)	 <p>ZAKIEV VADIM ISLAMOVICH Position: Associate Professor Scientific degree: PhD Teacher profile: www.lib.nau.edu.ua/naukpraci/teacher.php?id=11162 Phone.: 406-71-71 E-mail: vadym.zakiev@npp.nau.edu.ua Workspace: 11.121</p>
Originality of the discipline	Author's course, teaching in English
Link on discipline	https://classroom.google.com/u/2/c/MTEyNDY2NTMxMTE2