STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Man - possibilities and limitations 3**		Code **1010601141010637633**
Field of study **Aerospace Engineering**	Profile of study (general academic, practical) **(brak)**	Year /Semester **2 / 4**
Elective path/specialty **Aircraft Piloting**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **First-cycle studies**	Form of study (full-time,part-time) **full-time**	

No. of hours				No. of credits
Lecture: **1** Classes: **-** Laboratory: **-** Project/seminars: **-**				**1**

Status of the course in the study program (Basic, major, other) **(brak)**	(university-wide, from another field) **(brak)**

Education areas and fields of science and art	ECTS distribution (number and %**)**

technical sciences
    Technical sciences
	1 100%
	          1 100%

Responsible for subject / lecturer:	Responsible for subject / lecturer:
dr n. med. Karol Szymański email: rofe@tlen.pl tel. +48 602 631 428 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań	dr hab. inż. Agnieszka Wróblewska email: agnieszka.wroblewska@put.poznan.pl tel. +48 784 698 595 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań

Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	in the field of general and air psychology, the essence and functioning of the cognitive, emotional and motivational processes of man [PRK4]
2	**Skills**	can apply the scientific method in solving problems [PRK4]
3	**Social competencies**	knows the limits of own knowledge and skills; can work in a group [PRK4]

Assumptions and objectives of the course:

familiarizing the student with the human structure and emotional and motivational processes of a man functioning in normal, difficult and extreme situations. Basic human cognitive processes - perception and attention and their importance in the process of information management in the human - technical object system. The dynamics of small social groups and its application in the process of constructing effective task forces in aviation. Managing crew / team resources (CRM).

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. has detailed knowledge related to selected issues in the field of human capabilities and limitations when operating the aircraft in flight, as well as the capabilities and limitations of the air ambulance system - [K1A_W15]

2. has basic knowledge necessary to understand social, economic, legal and other non-technical conditions of engineering activities - [K1A_W24]

3. knows the general principles of creating and developing forms of individual entrepreneurship, also taking into account time management, as well as the ability to correctly self-present, using knowledge in the field of science and scientific disciplines, appropriate for aviation and astronautics - [K1A_W26]

Skills:

1. knows how to use native and international languages to the extent that it allows to understand technical texts and write technical descriptions of machines in the field of aviation and astronautics (technical terminology) - [K1A_U01]

2. can obtain information from literature, the internet, databases and other sources. Can integrate the information obtained and interpret conclusions and create and justify opinions - [K1A_U04]

Social competencies:

1. understands the need to learn throughout life; can inspire and organize the learning process of other people - [K1A_K01]

2. can interact and work in a group, taking on different roles in it - [K1A_K03]

3. able to properly define the priorities for the implementation of a task set by himself or others - [K1A_K04]

Assessment methods of study outcomes
computer exam using Aviationexam software

Course description
Knowledge of the structure of the human body. Functioning of individual systems and organs. Techniques of negotiation and conflict resolution. Effective conflict management. Error as a psychological category. Theory and model of human error formation. The sources of their formation. Hypotheses for translating reality. Principles of cooperation with people, techniques of motivating subordinates, time management techniques, methods of selection, assessment and development of personnel, negotiation and conflict techniques, techniques of organizing staff work in garrison and polygonal conditions, sources of human error, with particular reference to air errors. The dynamics of functioning of small social groups, crew resource management (CRM), operational risk management (ORM), situational awareness, risk areas and propensity to make mistakes.

Basic bibliography:

1. Szajnar S.: ?Czynnik ludzki w obsłudze urządzeń technicznych?, Skrypt WAT, Warszawa 2010

2. Scott W. E., Cummings L. L.: ?Zachowanie człowieka w organizacji?, Państwowe Wydawnictwo Naukowe, 1983

3. Janowska Z.: ?Zarządzanie zasobami ludzkimi?, Polskie Wydawnictwo Ekonomiczne, 2010

Additional bibliography:

Result of average student's workload	
Activity	**Time (working hours)**
1. Participation in classes (according to plan)	15
2. Participation in the exam / pass	1
3. Preparation for the exam / pass	10

Student's workload		
Source of workload	**hours**	**ECTS**
Total workload	26	1
Contact hours	16	1
Practical activities	0	0