



## Subject card

Subject name and code	, PG_00056094						
Field of study	Mechanical and Medical Engineering						
Date of commencement of studies	October 2021	Academic year of realisation of subject	2023/2024				
Education level	first-cycle studies	Subject group	Subject group related to scientific research in the field of study				
Mode of study	Full-time studies	Mode of delivery	at the university				
Year of study	3	Language of instruction	Polish				
Semester of study	6	ECTS credits	1.0				
Learning profile	general academic profile	Assessment form	assessment				
Conducting unit	Institute of Mechanics and Machine Design -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	Bartosz Trzeciak					
	Teachers	Bartosz Trzeciak					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	15.0	0.0	0.0	15
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	Number of study hours	15	0.0	0.0	15		
Subject objectives	Acquainting the student with the techniques of pre-medical assistance to victims of injuries, including those in life-threatening situations.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U01] he/she is able to acquire knowledge and self-studying, he/she is able to find needed information in specialist books, databases and other sources, he/she is able to integrate information and draw conclusions, he/she is able to communicate by using different technics in work and outside	The student is able to use medical library, scientific databases and other sources.	[SU5] Assessment of ability to present the results of task
	[K6_U10] he/she is able to assess the human body physic and basic functioning of the body organs, he/she is able to use basic medical knowledge to solve mechanical-medical problems in the scope of the MME study	The student is able to assess the basic parameters of the heart and cardiovascular system.	[SU1] Assessment of task fulfilment
	[K6_W12] he/she has basic knowledge in the field of fundamental medical sciences, human body anatomy, and physiology, salvage service	The student has knowledge of the structure of human organs and basic medical equipment used in emergency medical services.	[SW1] Assessment of factual knowledge
	[K6_K02] he/she is aware of importance of professional dealing and to fulfill ethics obligations, he/she understands other (non-technical) abilities of mechanical engineering professional, their influence on the society and security of environment, he/she is aware of importance of social cooperation	The student understands the non-technical aspects of an engineer's work in a hospital, has the habit of working in order and cleanliness, is vigilant in anticipating potential problems and errors	[SK5] Assessment of ability to solve problems that arise in practice
	[K6_U11] he/she uses basic medical apparatus and devices, he/she applies knowledge related to the visual diagnosis in the scope of the MME study	The student is able to use basic medical equipment used in first aid, i.e. oropharyngeal tube, self-inflating bag, automatic defibrillator. Student can treat injuries as part of pre-medical aid.	[SU3] Assessment of ability to use knowledge gained from the subject
	[K6_U12] he/she applies basic life-saving activities in the scope of lavage service	The student knows how to follow the ABC first aid algorithm.	[SU1] Assessment of task fulfilment

Subject contents	<ol style="list-style-type: none"> <li>1. Assessment of the patient's condition to determine the management.</li> <li>2. Place the patient in the correct position for the type of illness or injury.</li> <li>3. Basic cardiopulmonary resuscitation in adults and children.</li> <li>4. Deviceless restoration of airway patency.</li> <li>5. Instrumental restoration of airway patency using, in particular, an oropharyngeal tube and a nasopharyngeal tube.</li> <li>6. Oxygen administration.</li> <li>7. Supporting breathing or providing replacement ventilation with the use of: face mask, respiratory valve, self-inflating bag.</li> <li>8. Perform an automatic defibrillation.</li> <li>9. Monitoring of respiratory system functions.</li> <li>10. Monitoring the functions of the circulatory system.</li> <li>11. Assessment of patient awareness according to the Glasgow scale and the assessment of pupil width and their reaction to light.</li> <li>12. Determination of glucose concentration using a glucometer.</li> <li>13. Dressing wounds.</li> <li>14. Immobilization of fractures, sprains and sprains.</li> <li>15. Immobilizing the spine with particular emphasis on the cervical segment.</li> <li>16. Medical segregation in case of mass incidents and catastrophes.</li> <li>17. Practical classes on medical phantoms.</li> </ol>								
Prerequisites and co-requisites	Knowledge of anatomy, human physiology and propaedeutics of internal diseases.								
Assessment methods and criteria	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Subject passing criteria</th> <th style="width: 30%;">Passing threshold</th> <th style="width: 30%;">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td>Colloquium</td> <td>60.0%</td> <td>100.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Colloquium	60.0%	100.0%
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Colloquium	60.0%	100.0%							
Recommended reading	Basic literature	2021 Resuscitation Guidelines Polish Resuscitation Council.  Teaching materials discussed in class.							
	Supplementary literature	OSTRE STANY ZAGROŻENIA ŻYCIA W CHOROBYCH WEWNĘTRZNYCH ed. Franciszek Kokot, Publisher: PZWL							
	eResources addresses	Adresy na platformie eNauczanie:							
Example issues/ example questions/ tasks being completed									
Work placement	Not applicable								