

Module code	M_WE_SEM2 PW 1A/2A PPOM
Field of study	Veterinary medicine
Module name, also the name in English	Pierwsza pomoc
	First aid
Language of instruction	English
Module type	Optional
Level of studies	Long-cycle master's degree studies
Form of study	Full-time
Year of study in the field of study	I
Semester of study in the field of study	II
ECTS credits, divided into contact/non-contact hours	1 (0.5/0.5)
Academic title/degree, name of the person responsible for the module	Prof. dr hab. Zbigniew Grądzki
Unit teaching the module	Department of Epizootiology and Infectious Diseases, Faculty of Veterinary Medicine, Lublin University of Life Sciences
Module objective	Providing students with basic knowledge and skills in first aid for injured persons
The learning outcomes for the module include a description of the knowledge, skills and social competences that the student will gain after completing the module.	Knowledge:
	K1. Knows the general rules of conduct at the scene of an incident (accident)
	K2. Knows algorithms for management of various health and life-threatening conditions
	Skills:
	S1. Is able to recognize an immediate health and life-threatening condition
	S2. Is able to perform rescue activities and procedures in various states of health and life threat, taking into account their specificity and the course of action
	S3. Is able to correctly perform CPR and external defibrillation on a person in cardiac arrest
	Social competences:
	Sc1. Developing an attitude of openness and sensitivity to the needs of others
Sc2. Developing decision-making skills in extreme situations	
Prerequisites and additional requirements	No prerequisites or additional requirements

<p>Module program content</p>	<p>Seminar topics</p> <ol style="list-style-type: none"> 1. History of first aid. The legal basis for the responsibility to provide first aid. National Emergency Medical Services Act. Ethics of emergency response. 2. Definition and purposes of first aid. Scope of first aid 3. European Resuscitation Council Guidelines 2015 and 2020. Polish Resuscitation Council, current first aid guidelines, and changes made in rescue procedures. 4. "Rescue chain", "Survival chain" - organisation of modern emergency medical systems 5. General rules of conduct at the accident scene. Situation assessment. Safety assessment. First aid. Consciousness assessment. Respiratory assessment. Calling emergency services. Further aid for the injured person. Passing information about the injured 6. Pathophysiology of bodily function disorders. Disorders of the functions of the various systems and organs of the body. Pathophysiology of sudden cardiac arrest, theoretical basis of resuscitation. 7. Definition, causes, mechanisms, and diagnosis of sudden cardiac arrest. Basic epidemiology of cardiovascular diseases, the most common morbidity among adults, the most common causes of cardiac arrest in children, external factors leading to cardiac arrest, indications for resuscitation prior to calling the emergency medical service, instructions for the dispatcher. 8. Unconscious injured person. Recognising states of unconsciousness. General principles of dealing with an unconscious injured individual. 9. Accidental and intentional poisoning with various substances. Poisoning classification, food poisoning, chemical agents and toxic plants, gas poisoning, venoms. 10. Psychotraumatology. Psychology of emergency response in relation to victims and emergency teams. Situational and post-traumatic stress. Dealing with panic. Rules for gathering important information about an event. Opportunities and ways to provide psychological support at the scene and in the long term. <p>Topics of practical exercises</p> <ol style="list-style-type: none"> 1. Body positioning of an injured person in various life-threatening situations. Safe side position. Methods of monitoring vital functions. 2. Techniques for maintaining and restoring vital functions of an injured person. Cardiopulmonary resuscitation procedures in line with current standards (European Resuscitation Council guidelines 2015). 3. Basic resuscitation procedures (BLS) in adults. Procedure algorithm. 4. Pediatric (P-BLS) and infant resuscitation procedures. Neonatal resuscitation. Resuscitation principles in pregnant women.
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	<ol style="list-style-type: none"> 5. Goals and principles of using automated external defibrillation (AED) - indications for use, flow chart in line with ERC 2015 guidelines 6. Life-threatening hazards caused by the presence of a foreign body in the airway in adults and children. Symptoms of choking in an adult and child when the patient is still conscious. Symptoms of choking when the injured is unconscious. Treatment for the choking victim. 7. Injuries. Types of wounds. Haemorrhages. Bandaging. The course of the wound healing process. Basic information on dressing various types of wounds and protecting against infection (medical supplies, dressing and support materials, medications). Principles of dressing specific parts and areas of the body. First aid kit - components and application 8. Treatment procedures of injuries to the chest, abdomen, pelvis, head, spine, muscles and other musculoskeletal, genitourinary system. Injury treatment for pregnant women. 9. Handling of the drowning victim. Drowning hazards and diving accidents. Dealing with altitude sickness (dysbaria) 10. Dealing with the electric shock victim. Irradiation with radioactive substances. Lightning strike. 11. Dealing with heat and cold-related injuries. Burns and frostbite, hyperthermia, hypothermia. Thermal and chemical burns. Heat stroke - diagnosis and pre-hospital care 12. Life-threatening emergencies associated with nervous system disorders. Convulsions, epileptic seizures - causes and symptoms, emergency management. 13. Treatment procedure in the event of upper and lower airway failure. Acute respiratory asthma attack, respiratory failure. Dealing with acute allergic reactions. 14. Syncope - diagnosis and procedure, identifying the need for calling an emergency medical team. 15. Handling traffic accidents and mass disasters. Dividing injured persons. Specificity and tactics of dealing with different types of mass emergencies (industrial, chemical, communication threats, natural disasters). Conducting operations during various phases of the emergency response, ongoing prioritising. Preparing hospitals and other entities to secure mass casualty events. Cooperation of emergency responders.
List of core and supplementary literature	<p>Core literature</p> <ol style="list-style-type: none"> 1. Alton L. Thygerson, Steven M. Thygerson, Howard K. Mell „First Aid” Jones & Bartlett Learning, LLC, 2016 2. “Emergency First Response (EFR) Primary and Secondary Care Participant Manual” Emergency First Response Corp. 30151 Tomas, Rancho Santa Margarita, CA 92688-2125 USA 3. Alton L. Thygerson, Steven M. Thygerson “Standard First Aid, CPR, and AED” Jones & Bartlett Publishers, 2016

Planned forms/activities/teaching methods	Practical seminar, multimedia presentations, demonstrations of first aid methods, practical exercises performed by students under the supervision of the instructor
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<p>Verification methods and ways of documenting the achieved learning outcomes.</p>	<p>W.1, W.2 Ongoing student assessment, written work, and an exam including 50 single-choice questions. Evaluation of the written work (test) is based on the following criteria:</p> <p>It is assumed that the student demonstrates:</p> <ul style="list-style-type: none"> – Satisfactory (3.0) level of knowledge when he/she obtains from 51 to 60% of the total points determining the maximum level of knowledge and respectively: – Satisfactory plus (3.5) - from 61 to 70% of the total points – good (4.0) - from 71 to 80% of the total points – plus good (4.5) - from 81 to 90% of the total points – very good (5.0) - above 91% of total points <p>U.1, U.2, U.3 Assessment of practical first aid skills during the practical classes and final credit. Final credit is a three-step process. The student must demonstrate basic knowledge of first aid to the injured, correctly demonstrate selected algorithms of rescue procedures in various life and health-threatening conditions as indicated by the examiner, and correctly perform cardiopulmonary resuscitation using a manikin equipped with CPR functions electronic monitoring system. The final grade is calculated as the arithmetic mean of the component grades from the oral examination, the grade from the practical part concerning rescue algorithms and the CPR assessment. The criteria for component grades are as follows:</p> <p>Very good</p> <p>Primary criterion:</p> <p>Performing CPR on a manikin with a CPR monitoring function. The efficiency of performing chest compressions and rescue breaths rated above 90%.</p> <p>Supplementary criteria:</p> <p>The student demonstrates excellent knowledge of basic life-saving procedures, including BLS and the rational and safe use of AEDs. The student is proficient in differentiating hemorrhages and how to stop bleeding in premedical first aid. The student is able to properly deal with injuries to the head, chest, abdominal cavity and is very familiar with the principles of first aid for fractures and injuries to long bones and joints as well as spinal injuries. The student will demonstrate the ability to perform emergency procedures for heat stroke, shock, when a foreign body is found in the eyeball and other tissues. The student demonstrates proficiency when dealing with the burn and frostbite victim and is well-versed in all methods of the wound and injury care.</p> <p>Good plus</p>
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Primary criterion:

Performing CPR on a manikin with a CPR monitoring function. The efficiency of performing chest compressions and rescue breaths rated above 85-90%.

Supplementary criteria:

Student is able to perform CPR correctly on a phantom and knows the principles of using AED in the CPR process. The student is able to correctly diagnose all life-threatening conditions, including types of injuries, and is able to provide first aid suitable to the injury. The student knows how to appropriately follow up on identified respiratory distress, including apnea. The student takes appropriate action for sudden cardiac arrest, as well as for haemorrhage and traumatic shock, choking, fractures, burns, hypothermia, syncope, hypothermia, and poisoning.

Good

Primary criterion:

Performing CPR on a manikin with a CPR monitoring function. The efficiency of performing chest compressions and rescue breaths rated between 80-85%.

Supplementary criteria:

The student applies and understands the basic first aid related algorithms and knows the basic principles of first aid based on the emergency chain of command. The student knows the general principles of scene management and the principles of dealing with an unconscious injured. The student demonstrates knowledge of the guidelines for the use of an AED, is able to determine the condition of an injured person and act appropriately in cases of respiratory distress (apnea), cardiac arrest, hemorrhage, traumatic shock, choking, fractures, burns, hypothermia, syncope, and toxic poisoning.

Satisfactory plus

Primary criterion:

Performing CPR on a manikin with a CPR monitoring function. The efficiency of performing chest compressions and rescue breaths rated between 75-80%.

Supplementary criteria:

The student knows the basic principles of first aid and algorithms based on the emergency chain of command. The student knows the general principles of scene management and knows what to do when dealing with an unconscious injured. The student demonstrates knowledge of guidelines for the application of AED. The student can choose an appropriate course of action for respiratory distress (apnea), cardiac arrest, haemorrhage, traumatic shock, choking, bone fractures, burns, syncope, hypothermia, and poisoning.

	<p>Satisfactory</p> <p>Primary criterion: Performing CPR on a manikin with a CPR monitoring function. The effectiveness of performing chest compressions and rescue breaths rated between 70-75%.</p> <p>Supplementary criteria: The student knows the basic principles of first aid based on the emergency chain of command. The student knows the general principles of scene management and the principles of dealing with an unconscious injured. The student is familiar with the guidelines for the use of an AED and the basic techniques of pre-hospital care for injuries.</p> <p>Unsatisfactory</p> <p>Primary criterion: Performing CPR on a manikin with a CPR monitoring function. The efficiency of performing chest compressions and rescue breaths rated below 70%.</p> <p>Supplementary criteria: The student demonstrates very poor knowledge of the general principles of first aid in human life and health emergencies. K.1, K.2 Observation and evaluation of the student during practical classes. The evaluation is done by the lecturer of the class. Significant factors are student's attitude in the rescuer-injured relationship and the efficiency of the undertaken actions as well the reasonability of specific decisions during the rescue procedure. When the rescue procedure is completed, the evaluator shall inform the student of the outcome, indicating the strengths and weaknesses of the performed actions that affect the grade. The assessment of social competences is not included in the calculation of the final passing grade.</p> <p>Forms of documenting the achieved results: tests, teacher's register, final credit test</p>
ECTS credits	<p>Contact hours</p> <ul style="list-style-type: none"> • classes attendance – 15 hours (0.45 ECTS) • Attendance for credit test – 1 hour (0.05 ECTS) <p>Non-contact hours</p> <ul style="list-style-type: none"> • Preparation for practical classes - 6 hours (0.3 ECTS) • Preparation for credit test – 4 hours (0.2 ECTS)
The workload of activities that requires direct participation of an academic teacher	<ul style="list-style-type: none"> • classes attendance - 15 hours (0.45 ECTS) • Attendance for credit test – 1 hour (0.05 ECTS)

<p>Relation of module learning outcomes to course learning outcomes.</p>	<p>K1 – W-other ++ K2 – W-other ++ K1 – U- other ++ S2 – U- other ++ S2 – U- other ++ S3 – U- other ++ Sc1 – K11++ Sc2 –K1+++</p>
<p>Elements and values affecting the final grade</p>	<p>The following shall not apply</p>