

Description of the outcomes of learning for a field of study

Field of study: veterinary medicine

Description of the outcomes of learning for a field of study

Name of the field of study: veterinary medicine

Level: long-cycle Master's degree studies

Profile: general academic

An academic discipline or disciplines to which the outcomes of learning apply:

leading scientific discipline (%): veterinary medicine 100%

The description of the outcomes of learning takes into account the universal characteristics of first-cycle studies, level 7, specified in the Act of 22 December 2015 on the Integrated Qualifications System (Journal of Laws of 2016 item 64 and 1010, as amended.) and the characteristics of the outcomes of learning of second-cycle studies, level 7, specified in the regulations issued based on Art. 7 sec. 3 of the aforementioned Act.

Characteristics of the outcomes of learning for the qualifications at Polish Qualifications Framework, level 7

Symbols of learning outcomes for the field of study	Directional learning outcomes	The reference to the second level characteristics of the PQF learning outcomes
---	-------------------------------	--

BASIC SCIENCES KNOWLEDGE the graduate:

WE_W01	knows and describes the normal structures of an animal organism: cells, tissues, organs and systems	P7S_WG
WE_W02	knows the structure, describes and explains the functions of individual systems of the animal organism (respiratory, digestive, circulatory, excretory, nervous, movement, reproductive, endocrine, immune) and skin	P7S_WG
WE_W03	describes and interprets the development of organs and the whole organism in relation to the adult organism	P7S_WG
WE_W04	describes and explains metabolic processes at the molecular, cellular, organ and systemic levels	P7S_WG
WE_W05	describes and explains the phenomena of homeostasis, neurohormonal regulation, reproduction, aging and death	P7S_WG

WE_W06	describes, explains and interprets the principles and mechanisms underlying animal health, disease emergence and treatment - from the cell level, through the organ, animal, animal herd to the entire animal population	P7S_WG
WE_W07	knows and interprets pathophysiological changes in organs and systems and biological (including immunological) and pharmacological mechanisms enabling recovery	P7S_WG
WE_W08	identifies and describes the biology of infectious agents causing animal-transmitted diseases and anthroozoonoses, including the mechanisms of disease transmission and the body's defense mechanisms	P7S_WG
WE_W09	defines and describes the principles and processes of inheritance, recognises genetic disorders and knows the basics of genetic engineering	P7S_WG
WE_W10	defines and describes the mechanisms of action of specific groups of drugs, their disposition in the system and mutual interactions	P7S_WG
WE_W11	uses antibiotic therapy	P7S_WG
WE_W12	prescribes medications	P7S_WG
WE_W13	use Polish and Latin medical nomenclature	P7S_WG
WE_W14	uses a modern foreign language to a degree which enables him to communicate with specialists in the field of veterinary and related sciences and to use foreign language source materials	P7S_WG

CLINICAL SCIENCES

WE_W15	describes, explains and interprets disorders at the cell, tissue, organ, system and organism level in the course of disease	P7S_WG
WE_W16	describes, explains and interprets the mechanisms of organ and systemic pathologies	P7S_WG
WE_W17	describes and interprets the causes and symptoms, describes and interprets anatomopathological changes, applies the principles of treatment and prevention in individual disease entities	P7S_WG
WE_W18	implements the principles of diagnostic (including differential diagnosis) and therapeutic proceedings	P7S_WG
WE_W19	conducts a clinical examination of the patient and monitors the health condition of animals in large-scale farming	P7S_WG
WE_W20	follows the correct procedure for dealing with notifiable diseases	P7S_WG
WE_W21	collects, analyses and appropriately interprets clinical	P7S_WG

	data and the results of laboratory and additional tests	
WE_W22	indicates and interprets the relevant provisions of law, knows the principles of issuing rulings and prepares opinions for courts, state, local government and professional administration bodies	P7S_WK
WE_W23	knows the principles of functioning of the state veterinary service, also in terms of public health protection	P7S_WK

LIVESTOCK PRODUCTION

WE_W24	describes breeds within animal species and explains the principles of animal husbandry	P7S_WG
WE_W25	describes the principles of selecting animals for mating, methods of reproduction and selection of animals	P7S_WG
WE_W26	describes the principles of animal nutrition (including species differences), arranges and analyses food rations	P7S_WG
WE_W27	describes and evaluates conditions that ensure animal welfare	P7S_WG
WE_W28	describes and interprets the principles of production economics	P7S_WG P7S_WK
WE_W29	describes the conditions for proper management and disposal of by-products and waste associated with animal production	P7S_WG

FOOD HYGIENE

WE_W30	describes and interprets the principles of protecting consumer health through proper supervision of the production of foodstuffs of animal origin	P7S_WG P7S_WK
WE_W31	describes, interprets and evaluates conditions of hygiene and technology of production and food safety, and uses appropriate legal acts regulating veterinary supervision	P7S_WG
WE_W32	carries out ante- and post-mortem inspection of animals	P7S_WG
WE_W33	describes and implements the procedures related to HACCP(<i>Hazard Analysis and Critical Control Points</i>)	P7S_WG P7S_WK

GENERAL PROFESSIONAL SKILLS

the graduate is able to:

WE_U1	communicate effectively with clients, other veterinarians, and employees of inspection authorities and offices, state and local government	P7S_UK
WE_U2	demonstrate the ability to listen and respond in clear, appropriate language	P7S_UK
WE_U3	prepare clear case descriptions and maintain records, in accordance with applicable regulations, in a form that is understandable to the animal owner and readable by other veterinarians;	P7S_UK P7S_UW
WE_U4	demonstrate the ability to work in a multidisciplinary	P7S_UO

	team	
WE_U5	correctly interpret the veterinarian's responsibilities to the animal and its owner, and to the society and natural environment	P7S_UU
WE_U6	evaluate economic and social conditions under which the veterinary profession is practiced	P7S_UU
WE_U7	Is aware of the need to maximise professional skills to enhance the quality of veterinary care, animal welfare and public health	P7S_UU P7S_UW
WE_U8	has the ability to organise and run a veterinary practice	P7S_UW
WE_U8A	is aware of his own and the employer's responsibility for knowledge of and compliance with labour law and occupational safety and health	P7S_UW
WE_U8B	calculate fees and issue invoices and is aware of the importance of correct financial and medical record keeping	P7S_UW
WE_U8C	use IT systems to effectively communicate, collect, process, transmit, and analyse information	P7S_UW
WE_U8D	act in accordance with applicable standards and ethical principles	P7S_UW
WE_U9	demonstrate an understanding of the need and necessity for continuing education for ongoing professional development	P7S_UU
WE_U10	adapt his job offer to the changing situation on the labour market	P7S_UU
WE_U11	is aware of his own limitations and is able to use the advice and assistance of specialised units or persons in solving difficult problems	P7S_UU P7S_UO P7S_UK
WE_U12	use Polish and Latin medical nomenclature	P7S_UW
WE_U13	is able to communicate in a modern foreign language and use foreign language source materials	P7S_UK

PRACTICAL VOCATIONAL SKILLS

the graduate is able to:

WE_U14	conduct a medical and veterinary interview in order to obtain accurate information about a single animal or group of animals and its or their habitat	P7S_UW
WE_U15	handle animals safely and humanely and instructs others to do so	P7S_UW
WE_U16	perform a complete clinical examination of the animal	P7S_UW
WE_U17	provide first aid to all animal species for hemorrhage, wounds, respiratory distress, eye and ear injuries, unconsciousness, cachexia, burns, tissue damage, internal injuries, and cardiac arrest	P7S_UW
WE_U18	evaluate and advises on an animal's proper nutritional status	P7S_UW

WE_U19	collect, secure, and knows how to transport samples and perform standard laboratory tests, and correctly analyses and interprets laboratory test results	P7S_UW
WE_U20	use diagnostic apparatus, including radiographic, ultrasound and other equipment, in accordance with their intended use and safety rules for animals and humans	P7S_UW
WE_U21	implement appropriate procedures when a notifiable disease is identified	P7S_UW
WE_U22	obtain and use information about authorised drugs	P7S_UW
WE_U23	prescribe and administer drugs and medical materials in accordance with current regulations, including their safe storage and disposal	P7S_UW
WE_U24	apply methods of safe sedation, general and local anesthesia, and pain assessment and relief	P7S_UW
WE_U25	select and apply appropriate treatment	P7S_UW
WE_U26	implement the principles of surgical aseptics and antisepsis and applies appropriate methods of sterilisation of equipment	P7S_UW
WE_U27	assess the need for euthanasia and informs the animal owner accordingly, and can perform the euthanasia in accordance with professional ethics and proper handling of the remains	P7S_UW
WE_U28	perform autopsy with description and take samples and secure them for transport	P7S_UW
WE_U29	perform ante- and post-mortem inspection and assesses the quality of animal products	P7S_UW
WE_U30	document and use the information collected related to the health and welfare and, in some cases, productivity of the herd	P7S_UW
WE_U31	develop and implement species-specific prevention programmes	P7S_UW
WE_U32	evaluate and implement recommendations to minimise the risk of contamination, cross-contamination, and accumulation of pathogens in veterinary facilities and the environment	P7S_UW

SOCIAL COMPETENCE
the graduate is ready to:

WE_K1	demonstrate responsibility for decisions made toward people and animals	P7S_KO P7S_KR
WE_K2	observe ethical principles	P7S_KR
WE_K3	show tolerance for attitudes and behaviours resulting from different social and cultural conditions	P7S_KK
WE_K4	has the ability to resolve conflicts and the flexibility to respond to social changes	P7S_KK
WE_K5	critically evaluate own and others' actions and improve	P7S_KK

	proposed solutions	
WE_K6	has the habit of continuous improvement of knowledge and skills	P7S_KR
WE_K7	is aware of his own limitations	P7S_KK
WE_K8	put the patient's best interests first	P7S_KR
WE_K9	cooperate with representatives of other professions in the field of public health	P7S_KK
WE_K10	operate under conditions of uncertainty and stress	P7S_KK
WE_K11	organise the work of the team	P7S_KO
WE_K12	is aware of the necessity of involvement in professional and local government organisations	P7S_KO P7S_KR
WE_K13	is aware of the consequences of decisions taken, especially those that interfere with the natural environment	P7S_KK P7S_KR
WE_K14	knows the legal basis and principles of intellectual property protection	P7S_KK

OTHER LEARNING OUTCOMES:

WE_OTHER KNOWLEDGE

WE_OTHER SKILLS