SYLLABUS OF THE EDUCATIONAL COMPONENT

EPIZOOTOLOGY AND INFECTIOUS DISEASES OF ANIMALS

Specialty	**Veterinary medicine -211**	**the obligation of discipline**	**Mandatory component**
Field of knowledge	**Veterinary medicine**	**Faculty**	**Veterinary Medicine**
Level of higher education	**Master's degree**	**Department**	**Epizootology and Microbiology**

TEACHER

Savenko Mykola Mykolayovych

Higher education – specialty: veterinary medicine
Academic degree – Candidate of Veterinary Sciences 16. 00. 02 – pathology, morphology, animal oncology
Academic title – Associate Professor of the Department of Epidemiology and Microbiology
Work experience – 43 years
Indicators of professional activity on the course topic:
Co-author of more than 45 methodological instructions for laboratory and practical work on the course "Organization of Veterinary Affairs", "Episootology and Infectious Diseases";
Scientific internship at the National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine", Kharkiv; International sub-qualification, Lublin (Republic of Poland 2023), "Use of Training and Production Units" within the framework of EU/Tempus held at PTC+ Barneveld, Notherland; Free University of Berlin.
Co-author of 6 thematic publications on the organization of veterinary affairs and special epizootology for students of the Faculty of Veterinary Medicine in specialty 211 "Veterinary Medicine";
Participant in scientific and methodological conferences.

telephone	**0686100387**	**e-mail**	msavenko@ukr.net	**distance support**	**Moodle**

GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

Purpose	Providing applicants with thorough knowledge, skills and abilities in organizing a scientifically based system of diagnostic and anti-epizootic measures for infectious diseases common to many animal species, and modern methods of veterinary and sanitary treatments.
Format	lectures, practical classes, independent work, individual tasks, laboratory work, teamwork
Detailing of learning results and forms of their control	• ability to assess the health status of animals suffering from infectious diseases / individual practical tasks • ability to predict the course of infectious diseases and the effectiveness of control measures / individual practical exercises • ability to assess the quality of treatment and preventive measures for infectious diseases / individual practical tasks • ability to make informed decisions, carry out educational activities among industry workers and the population / individual tasks on the analysis of the regulatory framework
Scope and forms of control	14 ECTS credits (420 hours): 56 hours of lectures, 118 hours of laboratory classes, 186 hours of independent work; coursework - 30 hours; teaching practice - 30 hours; current control (8 chapters); final control - tests, exams.
Requirements of the teacher	timely completion of laboratory and practical tasks, activity, teamwork
Enrollment conditions	according to the curriculum

COMPLIANCE WITH THE EDUCATION STANDARD AND EDUCATIONAL PROGRAM

Competencies	GC1. Ability to abstract thinking, analysis and synthesis GC 2. Ability to apply knowledge in practical situations GC 3. Knowledge and understanding of the subject field and profession GC 9. Ability to make informed decisions GC 10. Ability to communicate with representatives of other professional groups of various levels (with experts of other fields of knowledge/types of economic activity) SC 2. Ability to use tools, special devices, instruments, laboratory equipment and other technical means to carry out the necessary manipulations during professional activities. SC 3. Ability to comply with the rules of labor protection, asepsis and antiseptics during professional activities. SC 4. Ability to conduct clinical studies in order to formulate conclusions about the condition of animals or establish a diagnosis. SC 6. Ability to select, pack, fix and send samples of biological material for laboratory research SC 7. Ability to organize and conduct laboratory and special diagnostic studies and analyze their results SC 8. Ability to plan, organize and implement measures to treat animals of different classes and species, sick with non-communicable, infectious and invasive diseases SC 10. Ability to develop strategies for safe, sanitary-related animal husbandry. SC 12. Ability to develop and implement measures aimed at protecting the population from diseases common to animals and humans. SC 13. Ability to develop strategies for the prevention of diseases of various etiologies. SC 19. Ability to carry out educational activities among industry workers and the population.	**Program learning outcomes**	PLO 1. Know and competently use the terminology of veterinary medicine PLO 2. Use information from domestic and foreign sources to develop diagnostic, therapeutic and business strategies PLO 4. Collect anamnestic data during registration and examination of animals, make decisions on the choice of effective methods of diagnosis, treatment and prevention of animal diseases. PLO 5. Establish a connection between the clinical manifestations of the disease and the results of laboratory tests. P LO 6. Develop quarantine and health measures, methods of therapy, prevention, diagnosis and treatment of diseases of various etiologies. PLO 7. Formulate conclusions on the effectiveness of selected methods and means of keeping, feeding and treating animals, prevention of infectious and non-infectious diseases, as well as production and technological processes at enterprises for keeping, breeding or operating animals of various classes and species. PLO 8. Monitor the causes of the spread of diseases of various etiologies and biological pollution of the environment with livestock waste, as well as materials and means for veterinary purposes. PLO 9. Develop measures aimed at protecting the population from diseases common to animals and humans. PLO 15. Know the rules for storing various pharmaceuticals and biological products, the methods of their enteral or parenteral administration, understand the mechanism of their action, interaction and complex effect on the animal body. PLO 17. Know the rules and requirements of biosafety, bioethics and animal welfare. PLO 18. Carry out accounting reporting during professional activities. PLO 19. Carry out educational activities among industry workers and the population.

STRUCTURE OF THE EDUCATIONAL COMPONENT (DISCIPLINE)

Chapter 1.
Epizootic process and system of anti-epizootic measures.

Study of types of infections depending on the ways of penetration of the pathogen into the body. Studies the patterns of development of the epizootic process and the stages of epizootics, elements of the epizootic process, laws and categories of epizootology. System of anti-epizootic measures, its general features and meaning, the concept of general and specific prevention of infectious diseases, the complexity of carrying out health measures and the choice of the leading chain, types and objects of disinfection.

Lecture 1-2	The concept of the epizootic process	**Laboratory class 1**	Safety precautions when working with infectious animals. Rules for the selection and shipment of material for laboratory research.	Independent work	Content chapter 1. 1. Make a presentation on the topic "Infection and the infectious process. Natural foci of infectious diseases". 2. Make a presentation on the topic "Veterinary disinfection in livestock complexes". 3. Make a presentation on the topic "Veterinary disinfection in poultry farms".
Lecture 3	General principles of prevention and elimination of infectious diseases	**LC 2**	Biological drugs in veterinary medicine.		
		LC 3	Veterinary disinfection.		
		LC 4	Means for disinfection of environmental objects.		
		LC 5	Disinfection quality control methods.		
		LC 6	Features of diagnostics of infectious diseases of animals.		

Chapter 2.
Bacterial diseases common to different animal species

Studies the etiology, epizootological features, pathogenesis, clinical and pathological signs, diagnostics, prevention and measures to combat infectious diseases: anthrax, tuberculosis, brucellosis, necrobacteriosis, pasteurellosis, leptospirosis, dermatomycoses, chlamydiosis, listeriosis.

Lecture 1	Anthrax	**LC 1**	Anthrax diagnostics. Measures for prevention and control of the disease.	Independent work	Content chapter 2 1. Develop a plan for health measures in a farm that is unfavorable for sheep anthrax. 2. Develop a plan for health measures in a farm that is unfavorable for cattle leptospirosis.
Lecture 2	Tuberculosis	**LC 3**	Diagnosis of animal tuberculosis. Measures for prevention and control of the disease.		
Lecture 3-4	Brucellosis Leptospirosis	**LC 4**	Diagnosis and differential diagnosis of leptospirosis in animals		
		LC 5	Chlamydia diagnostics and organization of preventive and health-improving measures		

		LC 6	Diagnosis of necrobacteriosis and measures to prevent and combat the disease		3. Develop a plan for health measures in a farm that is unfavorable for cattle tuberculosis.
		LC 7	Diagnosis of pasteurellosis and measures to prevent and control the disease		
		LC 8	Diagnosis of listeriosis and organization of preventive and health measures		
		LC 9	Diagnosis of tetanus and botulism, measures for prevention and control of diseases		
Chapter 3. **Viral diseases common to different animal species** **Studies the etiology, epizootological features, pathogenesis, clinical and pathological signs, diagnostics, prevention and measures to combat infectious diseases: rabies, Aujeszky's disease, smallpox, foot-and-mouth disease, leukemia**					
Lecture 1	Rabies	**LC 1**	Rabies diagnostics, prevention and control measures	Independent work	Content chapter 3 1. Develop a plan for the elimination of rabies for a disadvantaged territorial community in rural areas 2. Develop a plan for the prevention of rabies in wild carnivores for forestry 3. Develop a plan for preventive measures to prevent foot-and-mouth disease 4. Develop a plan for health measures in a farm disadvantaged in terms of bovine leukemia
		LC 2	Diagnosis of Aujeszky's disease, measures to prevent and combat the disease		
Lecture 2	Aujeszky's disease	**LC 3**	Diagnosis of bovine leukemia. Measures for prevention and control of the disease		
		LC 4	Diagnosis of animal pox. Measures for prevention and control of the disease		
Lecture 3	Leukosis	**LC 5**	Diagnosis of foot-and-mouth disease. Measures for prevention and control of the disease		
Chapter 4. **Infectious diseases of pigs** **Etiology, epizootological features, clinical signs, pathological changes, diagnostics, differential diagnostics, immunity, means of combating infectious diseases of pigs: CSF, ASF, erysipelas, Teschen disease.**					
Lecture 1	Classical swine fever	**LC 1**	Diagnosis of CSF in pigs. Measures for prevention and control of the disease	CaIndependent work	Content chapter 4
Lecture 2	African swine fever	**LC2**	Diagnosis of swine erysipelas. Measures for prevention and control of the disease		

Lecture 3	Teschen disease	**LC 3**	Differential diagnosis of diseases of pigs with hemorrhagic syndrome. Measures for prevention and control of diseases.		1. To draw up a scheme of differential laboratory diagnostics of infectious diseases with vesicular syndrome in pigs 2. To draw up a scheme of differential laboratory diagnostics of infectious diseases with respiratory syndrome in pigs 3. To draw up a scheme of differential laboratory diagnostics of infectious diseases with diarrheal syndrome in pigs 4. To draw up a scheme of differential laboratory diagnostics of infectious diseases for pigs accompanied by abortions 5. To draw up a scheme of differential laboratory diagnostics of infectious diseases with hemorrhagic syndrome in pigs 6. Make a presentation on the topic "Plan of health measures in a farm affected by atrophic rhinitis in pigs"
Lecture 4	Porcine reproductive and respiratory syndrome	**LC 4**	Diagnosis of viral transmissible gastroenteritis of pigs. Measures for prevention and control of the disease		
		LC 5	Diagnosis of swine dysentery. Measures for prevention and control of the disease		
		LC 6	Diagnosis of swine epidemic diarrhea. Measures for prevention and control of the disease		
		LC 7	Differential diagnosis of swine hemophilia. Disease prevention and control measures		
		LC 8	Differential diagnosis of diseases of pigs with vesicular syndrome. Measures for prevention and control of diseases		
		LC 9	Diagnosis of CVID. Measures for prevention and control of the disease		

Chapter 5.
Infectious diseases of young farm animals.

Study of etiology, epizootological features, pathogenesis, clinical and pathological signs, diagnostics, prevention and measures to combat infectious diseases of young farm animals such as colibacillosis, salmonellosis, streptococcosis, colienterotoxemia, anaerobic enterotoxemia, and rotavirus infections of calves.

Lecture 1	Salmonellosis of young farm animals	**LC 1**	Diagnosis, control and prevention measures for salmonellosis in young farm animals	Independent work	Content chapter 5. 1. Develop a plan of health measures for a farm that is unfavorable for bacterial gastroenteritis in pig farming 2. Develop a plan of health measures for a farm that is unfavorable for infectious respiratory diseases in calves 3. Develop a plan of health measures for a farm that is unfavorable for bacterial diseases in lambs
		LC 2	Diagnosis, control and prevention measures for colibacillosis in young farm animals		
Lecture 2	Colibacillosis of young farm animals	**LC 3**	Diagnosis, control and prevention measures for streptococcus in young farm animals		
Lecture 3	Viral enteritis of calves and piglets	**LC 4-5**	Diagnostics, measures to combat and prevent colienterotoxemia in young farm animals Diagnostics, control and prevention measures for anaerobic enterotoxemia in young farm animals		

Chapter 6.
Infectious diseases of cattle.

Study of the etiology, epizootological features, pathogenesis, clinical and pathological signs, diagnostics, prevention and measures to combat infectious diseases of cattle such as emkar, malignant edema, IRT, parainfluenza, viral diarrhea, rinderpest, lumpy dermatitis, paratuberculosis.
Study of the etiology, epizootological features, pathogenesis, clinical and pathological signs, diagnostics, prevention and measures to combat infectious diseases of small cattle such as bradsot, infectious enterotoxemia, bluetongue, infectious agalactia, ecthyma contagion, hoof rot, visna-maedi.

Lecture 1	Emphysematous carbuncle	**LC 1**	Diagnosis, control and prevention measures for ruminant clostridial diseases	Independent work	Content chapter 6 1. Develop a plan of preventive measures for transboundary infections of cattle 2. Develop a plan of preventive measures for the prevention of quarantine infections of small cattle 3. Develop a scheme of differential laboratory diagnostics of infectious diseases with vesicular syndrome in cattle 4. Develop a scheme of differential diagnostics of infectious diseases, accompanied by abortions in sheep 5. Develop a plan of health measures for pneumoenteritis in cattle for a disadvantaged farmContent chapter
Lecture 2	Infectious rhinotracheitis-pustular vulvovaginitis of cattle	**LC 2**	Diagnostics, control and prevention measures for infectious bovine rhinotracheitis, parainfluenza and bovine viral diarrhea		
Lecture 3 **Lecture 4**	Campylobacteriosis Prion infections in cattle	**LC 3**	Diagnosis, control and prevention measures for infectious agalactia of sheep and goats and contagious ecthyma		
		LC 4	Diagnosis, control and prevention measures for lumpy dermatitis and hoof rot		
		LC 5	Diagnostics, measures to combat and prevent visna, maeda		
		LC 6	Diagnosis, control and prevention measures for paratuberculosis		
		LC 7	Diagnosis, control and prevention measures for malignant catarrhal fever		
		LC 8	Diagnosis, control and prevention measures for contagious pleuropneumonia of cattle		
		LC 9	Diagnostics, control and prevention measures for rinderpest		
		LC10	Diagnosis, control and prevention measures for bluetongue		

Chapter 7.
Infectious diseases of horses

Study of etiology, epizootological features, pathogenesis, clinical and pathological signs, methods of laboratory diagnostics, prevention and measures to combat infectious diseases of horses such as glanders, mycosis, epizootic lymphangitis, infectious anemia, rhinopneumonia, equine influenza, infectious encephalomyelitis.

Lecture 1	Glanders	**LC 1-2**	Diagnosis, control and prevention measures for glanders Diagnosis, control and prevention measures for strangles (also called equine distemper)	Independent work	Content chapter 7 1. Develop a plan of health measures for a horse farm that is unfavorable for respiratory diseases in horses. 2. Develop a plan of health measures for an equestrian school that is unfavorable for bacterial diseases in foals
Lecture 2	Equine infectious anemia	**LC 3-4**	Diagnosis, control and prevention measures for epizootic lymphangitis Diagnosis, control and prevention measures for equine infectious anemia		
		LC 5-6	Diagnosis, control and prevention measures for rhinopneumonia and equine influenza Diagnosis, control and prevention measures for equine infectious encephalomyelitis		
		LC 7	Diagnosis, control and prevention measures for infectious metritis in mares		

Chapter 8.
Infectious diseases of poultry

Study of etiology, epizootological features, pathogenesis, clinical and pathological signs, methods of laboratory diagnostics, prevention and measures to combat infectious quarantine, respiratory, immunodeficiency diseases of poultry

Lecture 1	Newcastle disease	**LC 1**	Diagnosis, control and prevention measures for avian influenza	Independent work	Content chapter 8 1. Develop a plan of preventive measures for transboundary poultry infections 2. Develop a plan of preventive measures for preventing quarantine poultry infections 3. Develop a scheme for differential laboratory diagnostics of infectious respiratory diseases of poultry 4. Develop a scheme for differential diagnostics of infectious diseases accompanied by immunodeficiencies in poultry 5. Develop a plan of health measures for an unsuccessful poultry enterprise regarding salmonellosis
Lecture 2	Infectious bronchitis in chickens	**LC 2**	Diagnosis, control and prevention measures for infectious laryngotracheitis in poultry		
Lecture 3-4	Gumboro's disease Marek's disease	**LC 3**	Diagnosis, control and prevention measures for respiratory mycoplasmosis and pasteurellosis		
Lecture 5	Infectious avian encephalomyelitis	**LC 4**	Diagnosis, control and prevention measures for avian reovirus infection and chicken infectious anemia		
		LC 5	Diagnosis, control and prevention measures for Egg drop syndrome '76		
		LC 6	Diagnostics, control and prevention measures for viral enteritis of goslings and viral hepatitis of ducklings		
		LC 7	Diagnosis, control and prevention measures for poultry salmonellosis and colibacillosis		
		LC 8	Diagnosis, control and prevention measures for aspergillosis and ornithosis		

BASIC LITERATURE AND METHODOLOGICAL MATERIALS

Literature

1. Karysheva A. F. Special epizootology: textbook. Kyiv: Higher Education, 2002. 703 p.
2. General epizootology: textbook / B. M. Yarchuk et al.; ed. B. M. Yarchuk, L. E. Kornienko. Bila Tserkva, 2002. 656 p.
3. V. Nedosekov, M. Sytyuk, L. Kornienko, A. Gontar, N. Sorokina, R. Severyn. Viral diseases of pigs: electronic manual. Kyiv: Scientific and Methodological Center of the VFPO, 2020. https://vukladach.pp.ua/MyWeb/manual/wetmed/virysni_xvor_svuney/Golovna/Golovna.htm
4. V. Nedosekov, M. Sytyuk, L. Kornienko, A. Gontar, N. Sorokina, R. Severyn. Bacterial diseases of pigs: electronic manual. Kyiv: Scientific and Methodological Center of the VFPO, 2020. https://vukladach.pp.ua/MyWeb/manual/wetmed/bakter_xvor_svuney/Bakteriihvorobusvuney/golovna/Golovna.htm
5. Infectious diseases of sheep and goats: a textbook / O. A. Tkachenko et al. Zhytomyr: Polissya, 2012. 372 p.
6. Factor diseases of agricultural animals monograph / V. P. Lytvyn et al.; ed. V. P. Lytvyn, L. E. Kornienko. Bila Tserkva, 2002. 368 p.
7. Nedosekov V., Gontar A., Severyn R., Sorokina N., Electronic manual Anaerobic infections of cattle. Scientific and methodological center of the VFPO, Kyiv, 2022. 98 p.
8. Infectious diseases of animals with vesicular syndrome: Textbook / L.E. Kornienko, V.O. Busol, V.V. Nedosekov et al. – Ed. L.E. Kornienko. – Bila Tserkva: Bila Tserkva. State Agrarian University, 2011. – 272 p.
9. Sapronose infectious diseases of animals / L.E. Kornienko, V.V. Nedosekov, V.O. Busol et al.: monograph. – Ed. L.E. Kornienko, V.O. Busola. – Bila Tserkva: Bila Tserkva. State Agricultural University, 2010. -306 p.
10. Chronic infectious diseases of animals / L.E. Kornienko, V.O. Busola, V.V. Nedosekov and others; Edited by V.O. Busola, L.E. Kornienko. – Bila Tserkva, 2009. – 291 p.
11. Problems of infectious diseases of animals: Monograph / edited by V.A. Sinitsyn. – Nizhyn: Publisher PP Lysenko MM, 2015 – 544 p.
12. Transboundary diseases of animals with the basics of stamping-out: Textbook / V.V. Nedosekov, V.V. Melnyk, V.V. Makarov. – Kherson: Grin DS, 2015. – 336 p.
13. Infectious diseases of poultry / L.E. Kornienko, L.I. Nalyvaiko, V.V. Nedosekov and others; Edited by L.E. Kornienko. – Kherson: Grin DS., 2012. – 528 p.
14. Pathomorphology of infectious diseases of poultry: atlas / M.V. Skrypka, I.I. Panikar, M.M. Broshkov, L.O. Tarasenko. - Odesa, 2019. – 76 p.
15. Nedosekov V., Gontar A., Sorokina N., Melnyk V., Galatyuk O. Infectious diseases of horses: a textbook. Kyiv: Scientific and Methodological Center of the VFPO, 2022. 141 p. https://drive.google.com/file/d/1Roh5rxzSMyM37miuUoVCbE99-JrQFpMq/view (Ukraine)

Methodological support

1. Golovko V. O., Severyn R. V., Ivanchenko I. M., Gontar A. M. Epizootic process: methodological guidelines for conducting LPZ in general epizootology for students of the 3rd-4th years of the Faculty of Veterinary Medicine. Kharkiv: KhDZVA, 2021. 28 p.
2. Golovko V. O., Severyn R. V., Ivanchenko I. M., Gontar A. M. General principles of prevention and elimination of infectious diseases: methodological guidelines for conducting LPZ in general epizootology for students of the 3rd-4th years of the Faculty of Veterinary Medicine. Kharkiv: KhDZVA, 2022. 24 p.
3. Golovko V. O., Severyn R. V., Ivanchenko I. M., Gontar A. M. Diagnostics, differential diagnostics, organization of measures to prevent and combat bacterial diseases of animals: methodological guidelines for conducting laboratory classes in special epizootology for students of the 3rd-4th years of the Faculty of Veterinary Medicine. Kharkiv: KhDZVA, 2021. 35 p.
4. Severyn R. V., Ivanchenko I. M., Gontar A. M. Diagnostics, differential diagnostics, organization of measures to prevent and combat viral diseases of animals: methodological guidelines for conducting laboratory and practical classes in special epizootology for students of the 3rd-4th years of the Faculty of Veterinary Medicine. Kharkiv: KhDZVA, 2022. 37 p.
5. Severyn R. V., Gontar A. M. Infectious diseases of pigs: methodological guidelines for conducting laboratory classes in special epizootology for students of the 3rd-5th years of the Faculty of Veterinary Medicine. Kharkiv: KhDZVA, 2021. 44 p.
6. Golovko V. O., Severyn R. V., Gontar A. M., Ivanchenko I. M. Infectious diseases of young farm animals: methodological instructions for conducting laboratory and practical classes in special epizootology for students of the 3rd-5th years of the Faculty of Veterinary Medicine. Kharkiv: DBTU, 2023. 36 p.
7. Severyn R. V., Gontar A. M., Ivanchenko I. M. Anaerobic infections of cattle: methodological instructions for conducting laboratory and practical classes in special epizootology for students of the 3rd-5th years of the Faculty of Veterinary Medicine. Kharkiv: DBTU, 2023. 46 p.
8. Golovko V. O., Severyn R. V., Gontar A. M., Ivanchenko I. M. Pneumoenteritis of calves: diagnostics, treatment, prevention, control measures: methodological instructions for conducting laboratory and practical classes in special epizootology for students of the 3rd-5th years of the Faculty of Veterinary Medicine. Kharkiv: DBTU, 2022. 56 p.
9. Methodological instructions for students of the Faculty of Veterinary Medicine for performing an individual educational and research task in the academic discipline "Epizootology and infectious diseases". Anaerobic infections of ruminants. Specialty 211- Veterinary medicine. Golovko V.O., Severyn R.V., Gontar A.M. State Biotechnological University. Department of Epizootology and Microbiology. Kh.: RVV DBTU, 2023. 58 p.
10. Golovko V. O., Severyn R.V., Gontar A.M., Ivanchenko I.M. Viral diseases of poultry: methodological instructions for conducting laboratory and practical classes in special epizootology for students of the 3rd-5th years of the Faculty of Veterinary Medicine. Kharkiv: DBTU, 2023. 36 p.
11. Severyn R. V., Gontar A. M., Ivanchenko I. M. Bacterial diseases of waterfowl: methodological instructions for conducting laboratory and practical classes in special epizootology for students of the 3rd-5th years of the Faculty of Veterinary Medicine. Kharkiv: DBTU, 2023. 46 p.
12. Golovko V. O., Severyn R. V., Gontar A. M., Ivanchenko I. M. Viral diseases of young waterfowl: methodological instructions for conducting laboratory and practical classes in special epizootology for students of the 3rd-5th years of the Faculty of Veterinary Medicine. Kharkiv: DBTU, 2022. 56 p.

RATING SYSTEM			
SYSTEM		**POINTS**	**ACTIVITY THAT IS ASSESSED**
Final evaluation	**100 ECTS points (standard)**	**up to 50**	**50% of the average grade for chapters**
		up to 50	**final testing**
Rating of section	**100-point total**	**up to 50**	**answers to test questions**
		up to 20	**oral answers in laboratory and practical classes**
		up to 30	**result of mastering the independent work block**

NORMS OF ACADEMIC ETHICS AND INTEGRITY

All participants in the educational process (including students) must adhere to the code of academic integrity and the requirements stipulated in the regulation "On Academic Integrity of Participants in the Educational Process of DBTU": to demonstrate discipline, good manners, respect each other's dignity, show kindness, honesty, and responsibility.