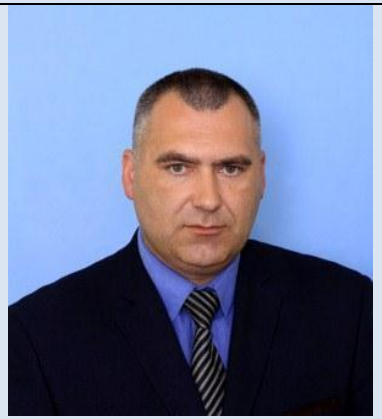
EDUCATIONAL COMPONENT SYLLABUS

Reproductology of small animals

specialty	**211 – Veterinary medicine**	**the obligation of discipline**	**selective component**
educational program	**veterinary medicine**	**faculty**	**veterinary medicine**
educational level	**Master of science**	**department**	**veterinary surgery and reproductology**

LECTURERS

Fedorenko Serhii Yakovych



Higher education – Kharkiv Zooveterinary Institute, 1999, specialist, qualification – doctor of veterinary medicine.
Scientific degree - Doctor of Veterinary Sciences, specialty 16.00.07 - Veterinary obstetrics
Academic rank – Professor
Work experience – 25 years
Indicators of professional activity on the course topic:

- author of over 100 scientific works, including more than 10 articles included in the scientometric databases Scopus and Web of Science, 2 textbooks, 2 monographs, 6 scientific and methodological recommendations and 8 technical specifications for veterinary drugs;
- 20 years of scientific experience.

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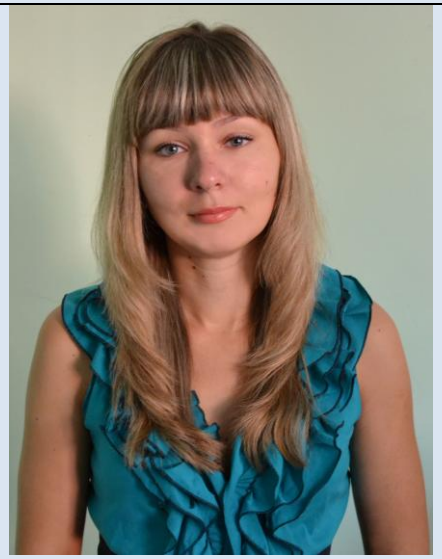
Naumenko Svitlana Valeriivna



Higher education – Kharkiv State Zooveterinary Academy, 2005, specialist, qualification – doctor of veterinary medicine.
Scientific degree - Doctor of Veterinary Sciences, specialty 16.00.07 - Veterinary obstetrics
Academic rank – Professor
Work experience – 20 years
Indicators of professional activity on the course topic:

- author of over 140 scientific works, including 13 articles included in the scientometric database Scopus and Web of Science, 114 articles in scientific professional publications of Ukraine, 2 textbooks, 4 monographs and 2 chapters of collective monographs, 46 abstracts of reports from international and all-Ukrainian scientific and practical conferences, 8 scientific and methodological recommendations and 2 technical conditions for veterinary drugs;
- 20 years of scientific experience.

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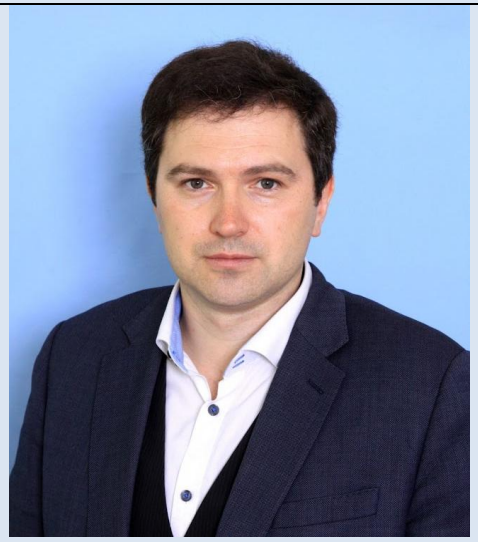
Siehodin Oleksandr Borysovych



Higher education – Kharkiv Zooveterinary Institute, 2001, specialist, qualification – doctor of veterinary medicine.
Scientific degree – Candidate of Veterinary Sciences (Ph.D.), specialty 16.00.05 – Veterinary surgery
Academic rank – Docent
Work experience – 24 years
Indicators of professional activity on the course topic:

- author and co-author of over 30 scientific works, including: textbooks in English – 3; chapter in a collective monograph – 1, patent for a utility model – 1;
- 20 years of scientific experience.

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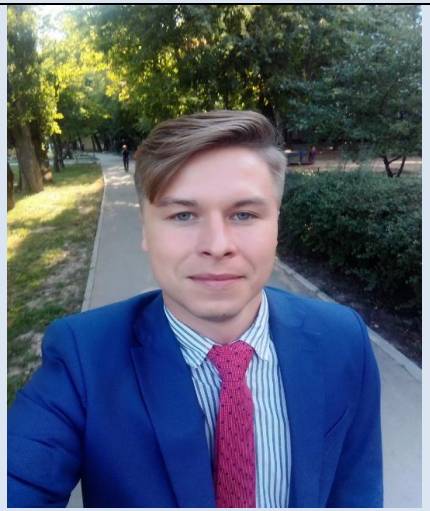
Koshevoi Vsevolod Ihorovych



Higher education – Kharkiv State Zooveterinary Academy, 2019, Master of science, qualification – doctor of veterinary medicine.
Scientific degree – Doctor of Philosophy, specialty – 211 Veterinary medicine, State Biotechnological University, 2023.
Work experience – 2 years
Indicators of professional activity on the course topic:

- author of over 100 scientific works, including 6 articles included in the scientometric database Scopus, 45 articles in scientific professional publications of Ukraine (including 16 in English), 1 monograph and 2 chapters of collective monographs, 42 abstracts of reports of international and all-Ukrainian scientific and practical conferences, 6 scientific and methodological recommendations and 1 technical conditions for a veterinary drug;
- 10 years of scientific experience;
- reviewer of scientific articles in journals included in international scientometric databases (Scopus – World's Veterinary Journal; Web of Science – Uttar Pradesh Journal of Zoology; etc.).

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GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT (DISCIPLINE)

Goal	to teach the applicant the basic methods of diagnosis, treatment and prevention of animal reproduction pathologies, diseases of the mammary gland and newborns, as well as a detailed study of the latest methods of reproduction of small animals using modern biotechnological methods**.**
Format	lectures, practical classes, independent work, individual tasks.
Scope and forms of control	3 ECTS credits (90 hours): 12 hours of lectures, 18 hours of laboratory work, 60 hours of independent work; current control; final control – differentiated credit
Teacher requirements	timely completion of independent work, presentations, activity, teamwork
Enrollment conditions	according to the curriculum

COMPLEMENTARY EDUCATION STANDARDS AND CURRICULUM

Competences	GC 2. Ability to apply knowledge in practical situations. GC 3. Knowledge and understanding of the subject area and profession. GC 9. Ability to make informed decisions. SC 2. Ability to use tools, special devices, instruments, laboratory equipment and other technical means to perform the necessary manipulations during professional activities. SC 3. Ability to comply with occupational safety, asepsis and antisepsis rules during professional activities. SC 4. Ability to conduct clinical studies to draw conclusions about the condition of animals or to establish a diagnosis.	**Program learning outcomes**	PLO 4. Collect anamnestic data during registration and examination of animals, make decisions on choosing effective methods of diagnosis, treatment and prevention of animal diseases. PLO 5. Establish a relationship between the clinical manifestations of the disease and the results of laboratory tests. PLO 10. Propose and use appropriate innovative methods and approaches to solving problem situations of professional origin.

	SC 7. Ability to organize and conduct laboratory and special diagnostic tests and analyze their results. SC 9. Ability to perform obstetrical-gynecological and surgical procedures and operations.				
STRUCTURE OF THE EDUCATIONAL COMPONENT (DISCIPLINE)					
Lecture 1	Obstetric, gynecological, andrological and biotechnological propaedeutics.	**Laboratory and practical lesson 1 (LPL 1)**	Obstetric, gynecological, andrological and biotechnological propaedeutics	**Independent work**	Information technologies in obstetrics, mastology, gynecology, andrology and animal reproduction biotechnology. Phytotherapy, acupuncture, homeopathy. Tissue, novocaine and ozone therapy. Blood supply and innervation of the reproductive system. Micro- and macrostructure of the organs of regulation and performance of the reproductive function of dogs and cats. Determining the optimal time for insemination of female dog and cats. History of the development of artificial insemination of female dog and cats. Hormonal background of the sexual cycle of female dog and cats.
Lecture 2	Morphological structure and physiological function of the reproductive organs	**LPL 2**	Morphological structure and physiological function of the reproductive organs in dogs and cats		
Lecture 3	Biotechnology of small animal reproduction	**LPL 3**	Biotechnology of small animal reproduction		
Lecture 4	Perinatal physiology and pathology	**LPL 4**	Perinatal physiology Pregnancy diagnostics..	**Independent work**	Pregnancy diagnostics. Pregnancy pathology. Labor pathology. Mammary gland diseases in the absence of lactation. Neonatology. Newborn care. Congenital pathologies and neonatal death. Infectious diseases. Pathology of the mammary gland of female dogs and cats. Pathology of the breast during lactation. Diagnostic methods of the genital tract.
Lecture 5	Neonatology. Mastology.	**LPL 5**	Perinatal pathology. Pathology of childbirth and the postpartum period.		
Lecture 6	Gynecological and andrological pathology.	**LPL 6**	Neonatology. Newborn care. Congenital pathologies.		
		LPL 7	Physiology and pathology of the mammary gland.		
		LPL 8	Gynecological pathology. Female infertility.		

		LPL 9	Male infertility.		Ultrasound diagnostics Vaginal cytology Vaginoscopy Infertility of female small animals. Disturbances of the sexual cycle in females Methods of diagnosing the sexual cycle in females. Infertility of males

BASIC LITERATURE AND METHODOLOGICAL MATERIALS

1. Berezovskyi A.V., Kharenko M.I. (Red.). Fiziolohiia ta patolohiia rozmnozhennia dribnykh tvaryn: navchalnyi posibnyk (2-e vydannia, pereroblene i dopovnene). Zhytomyr: Polissia, 2017. 392 s.
2. Iablonskyi V.A. Praktychne akusherstvo, hinekolohiia ta biotekhnolohiia vidtvorennia tvaryn z osnovamy androlohii. Kyiv: Meta, 2002. 319 s.
3. Iablonskyi V.A., Khomyn S.P. (Red.). Veterynarne akusherstvo, hinekolohiia ta biotekhnolohiia vidtvorennia tvaryn z osnovamy androlohii: pidruchnyk. Vinnytsia: Nova Knyha, 2006. 592 s.

Methodical support

1. Berezovskyi A.V., Kharenko M.I. (Red.). Fiziolohiia ta patolohiia molochnoi zalozy u tvaryn: navchalnyi posibnyk. Kyiv: DIA, 2018. 476 s.
2. Horalskyi L.P. (Red.). Anatomiia ta osoblyvosti fiziolohii sobak z osnovamy dresyruvannia: navchalnyi posibnyk. Zhytomyr: Polissia, 2008. 448 s.
3. Hryshko D.S. Lektsii z veterynarnoho akusherstva: navchalnyi posibnyk. Kharkiv: Prapor, 2003. 400 s.
4. Koshevoi V.P., Fedorenko S.Ia., Ivanchenko M.M., Naumenko S.V., Besedovska K.S., Skliarov P.M. Termohrafichna diahnostyka u veterynarnomu akusherstvi, hinekolohii ta androlohii (metodychni rekomendatsii). Kharkiv: RVV KhDZVA, 2013. 52 s.
5. Koshevoi V.P., Fedorenko S.Ia., Naumenko S.V., Ivanchenko M.M., Besedovskyi V.P., Onyshchenko O.V., Besedovska K.S., Pasternak A.M., Chuiko L.V., Koshevoi V.I., Skliarov P.M., Holota V.I., Taran H.V., Kravtsov M.N. Ozonomistski preparaty ta yikh vykorystannia u veterynarnii reproduktolohii (metodychni rekomendatsii). Kharkiv: RVV KhDZVA, 2014. 81 s.
6. Koshevoi V.P., Fedorenko S.Ia., Naumenko S.V., Ivanchenko M.M., Onyshchenko O.V., Besedovska K.S., Pasternak A.M., Hladtsinova I.O., Koshevoi V.I., Skliarov P.M., Maliukin Yu.V., Yefimova S.L., Klochkov V.K. Kompleksni preparaty, stvoreni na osnovi nano-biomaterialiv ta yikh vykorystannia u veterynarnii reproduktolohii (metodychni rekomendatsii). Dnipro: vydavnytstvo «Porohy», 2016. 110 s.
7. Koshevoi V.P. (Red.). Imunobiolohiia laktatsii u tvaryn: navchalno-metodychne vydannia. Dnipropetrovsk: Herda, 2015. 132 s.
8. Koshovyi V.P. (Red.). Veterynarna perynatolohiia: navchalnyi posibnyk. Kharkiv: RVV KhDZVA, 2008. 465 s.
9. Mazurkevych A.I., Karpovskyi V.I. (Red.). Fiziolohiia tvaryn: pidruchnyk. Vinnytsia: Nova Knyha, 2010. 424 s.
10. Rudyk S.K. (Red.). Anatomiia sviiskykh tvaryn: pidruchnyk. Kyiv: Ahrarna osvita, 2001. 575 s.
11. Skliarov P.M. Biotekhnolohiia vidtvorennia sobak i kotiv: navchalnyi posibnyk. Dnipro: FOP Shliupenkov O.A., 2022. 92 s.
12. HILL, Peter; WARMAN, Sheena; SHAWCROSS, Geoff. 100 top consultation sin small animal general practice. JohnWiley&Sons, 2011.
13. Simpson, Gillian, Gary CW England, and MikeHarvey. BSAVA manual of small animal reproduction and neonatology. British Small Animal Veterinary Association, 1998.
14. Lopate, Cheryl, ed. Management of pregnant and neonatal dogs, cats, and exoticpets. JohnWiley&Sons, 2012.

GRADING SYSTEM			
SYSTEM		**POINTS**	**ACTIVITY THAT IS ASSESSED**
Final assessment (different credit, exam)Final evaluation	**100 ECTS points (standard)**	**up to 100**	**40 % - Final testing**
			60 % - student's current work during the semester
Final assessment (non-differential credit)	**100 points ECTS (standard)**	**up to 100**	**100 % - average grade for sections**
Rating of section	**100 points total**	**up to 30**	**30 % - answers to test questions**
		up to 30	**30 % - the result of mastering the block of independent work**
		up to 40	**40 % - student activity in class (oral answers)**

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 SBTU": to demonstrate discipline, good manners, respect each other's dignity, show kindness, honesty, and responsibility.