EDUCATIONAL COMPONENT SYLLABUS

SPECIES-SPECIFIC OBSTETRICS, GYNECOLOGY AND ANIMAL REPRODUCTIVE BIOTECHNOLOGY

specialty	**211 – Veterinary medicine**	**the obligation of discipline**	selective
educational program	veterinary medicine	**faculty**	veterinary medicine
educational level	**Master's degree**	**department**	veterinary surgery and reproduction

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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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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GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

Goal	**formation of competencies to expand and deepen knowledge of the current state of obstetrics, gynecology and animal biotechnology, depending on their species.**
Format	**lectures, practical classes, independent work, individual tasks, teamwork**
Scope and forms of control	**3 ECTS credits (90 hours): 14 hours of lectures, 14 hours of laboratory and practical work; 68 hours of independent study, current control (3 chapters); final control - exam (differentiated assessment).**
Teacher requirements	**timely completion of tasks, activity, teamwork**
Enrollment conditions	**"free enrollment"**

COMPLEMENTS THE STANDARD OF EDUCATION AND THE EDUCATIONAL PROGRAM

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 establish a diagnosis. 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.	**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 clinical manifestations of the disease and laboratory test results. PLO 10. Propose and use appropriate innovative methods and approaches to solving problem situations of professional origin.

STRUCTURE OF THE EDUCATIONAL COMPONENT

Chapter 1. Cattle Reproduction

Lecture 1	Sexual (estrous) cycle and features of its manifestation in cows and heifers.	**Laboratory and practical**	Physiology and pathology of the ante-, intra- and postnatal periods.	**In de**	Pregnancy as a process. Physiology and pathology. Placentology. (Characteristics

	Features of obstetric pathology.	lesson (LPL 1)			of the embryo, fetus in cows. Stem cells. Problems and achievements. Sex of the embryo, fetus. Definition. Problems).
Lecture 2	Infertility of cows and heifers. Infertility of bulls.	LPL 2	Pathology of the breast. Gynecological diseases. Diagnosis and therapy of animals Andrological diseases. Methods of complex therapy and prevention of andrological pathology		Labor. Postnatal period. (Gonado- and metropathies. Obstetric sepsis. Diagnostics. Scientific justification for the use of pharmacological drugs). Neonatology and mastology (Features of the organ – colostral immunity, dairy products). Using modern methods for diagnosing mastitis (standards, milk scanners). Gynecology. Andrology. (Gynecological medical examination. Computer monitoring of reproduction. Gynecological diseases. Diagnostics, therapy, prevention. Andrological medical examination. Methodology. Ultrasonographic, thermographic examination. Postcytography method).
		LPL 3	Insemination of small animals		
Chapter 2. Reproduction of horses and pigs.					
Lecture 3	Features of horse reproduction.	LPL 3	Features of reproductive pathology in horses.	**Independent work**	Morphology of the reproductive system of females and males. Sexual cycle and methods of its regulation. Pregnancy as a process. Physiology and pathology. Placentology. Labor. Postnatal period. Features of newborn foals, piglets. Gynecological diseases. Diagnostics, therapy, prevention. Andrological diseases. Diagnostics, therapy.
Lecture 4	Features of pig reproduction.	LPL 4	Features of reproductive pathology in pigs.		
Chapter 3. Reproduction of sheep and other animals.					
Lecture 5	Features of physiology and pathology of the created sheep.	LPL 5	Features of diagnostics and treatment of sheep for reproductive pathologies.	**Independent work**	Morphology of the body apparatus of females and males. Article cycle and methods of its regulation. Vaginism. (Physiology and pathology. Placentology). Labor. Postnatal period. Peculiarities of newborn goats, lambs, whelps, kittens. Gynecological illness. Diagnosis, therapy, prevention. Andrological illness. Diagnostics, therapy.
Lecture 6	Features of the physiology and pathology of dogs.	LPL 6	Features of diagnosis and treatment of dogs for reproductive pathologies.		
Lecture 7	Features of physiology and pathology of cats.	LPL 7	Features of diagnosis and treatment of cats for reproductive pathologies.		

BASIC LITERATURE AND METHODOLOGICAL MATERIALS

Basic literature

1. Veterynarne akusherstvo, hinekolohiia ta biotekhnolohiia vidtvorennia tvaryn z osnovamy androlohii. Za red. V.A.Iablonskoho ta S.P.Khomyna.- Pidruchnyk.– Vinnytsia: Nova Knyha, 2006. -592 s.

2. Fiziolohiia ta patolohiia rozmnozhennia dribnykh tvaryn / Navchalnyi posibnyk: 2-e vydannia, pereroblene i dopovnene / [A.V. Berezovskyi, M.I. Kharenko, S.P. Khomin ta in.]; za zah. red. A.V. Berezovskoho ta M.I. Kharenka. – Zhytomyr: «Polissia», 2017. – 392.

3. Fiziolohiia ta patolohiia molochnoi zalozy u tvaryn: Navchalnyi posibnyk / [A.V. Berezovskyi, M.I. Kharenko, V.I. Liubetskyi ta in.]; za zah. red. A.V. Berezovskoho ta M.I. Kharenka. – K.: DIA, 2018. – 476.

4. V.A. Yablonskyi Praktychne akusherstvo, hinekolohiia ta biotekhnolohiia vidtvorennia tvaryn z osnovamy androlohii.- K.: Meta, 2002.- 319 s.

5. Imunobiolohiia laktatsii u tvaryn: navchalno-metodychne vydannia / V.P. Koshevoi, C.Ia. Fedorenko, O.V. Onyshchenko ta in. / za red. prof. V.P. Koshevoho. Dnipropetrovsk: Herda, 2015. 132 s.

Methodical support

1. Akusherska, hinekolohichna ta androlohichna propedevtyka: metodychni rekomendatsii / V.P. Koshevoi, Yu.P. Balym, M.M. Ivanchenko ta in. / Kh.: RVV KhDZVA, 2013. 52 s.

2. Koshevoi V.P. Termohrafichna diahnostyka u veterynarnomu akusherstvi, hinekolohii ta androlohii (metodychni rekomendatsii) /V.P. Koshevoi, S.Ia. Fedorenko, M.M.Ivanchenko ta in. – Kharkiv, - 2013. – 52 s.

3. Koshevoi V. P., Naumenko S. V., Skliarov P. M., Koshevoi V. I. Dystantsiino-bezkontaktna ta neinvaziina diahnostyka patolohichnykh protsesiv u honadakh samtsiv. Metodychni rekomendatsii. Kharkiv, 2017. 28 s.

4. Kompleksni preparaty, stvoreni na osnovi nano-biomaterialiv ta yikh vykorystannia u veterynarnii reproduktolohii: metodychni rekomendatsii / V.P. Koshevoi, S.Ia. Fedorenko, S.V. Naumenko ta in. / Kh.: RVV KhDZVA, 2015. 102 s.

5. Ozonomistski preparaty ta yikh vykorystannia u veterynarnii reproduktolohii: metodychni rekomendatsii / V.P. Koshevoi, S.Ia. Fedorenko, S.V. Naumenko ta in. / Kh.: RVV KhDZVA, 2014. 52 s.

6. Veterynarna perynatolohiia : navch. posibnyk dlia studentiv vyshchykh navchalnykh zakladiv / [V.P. Koshovyi, M.M. Ivanchenko ta in.] ; za zah. red. V.P. Koshovoho. – Kharkiv: RVV KhDZVA, 2008. – 465 s.

7. HILL, Peter; WARMAN, Sheena; SHAWCROSS, Geoff. 100 top consultations in small animal general practice. JohnWiley&Sons, 2011.

8. Simpson, Gillian, Gary CW England, and MikeHarvey. BSAVA manual of small animal reproduction and neonatology. British Small Animal Veterinary Association, 1998.

9. Lopate, Cheryl, ed. Management of pregnant and neonatal dogs, cats, and exotic pets. JohnWiley&Sons, 2012.

EVALUATION 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.