

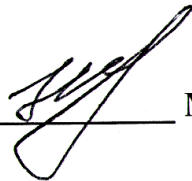
Ministry of Education and Science of Ukraine
Sumy National Agrarian University
Faculty of Veterinary Medicine
Department of Obstetrics and Surgery

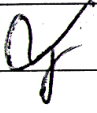
SYLLABUS OF THE COURSE

Professional elective discipline 7: "Veterinary service of pig breeding"

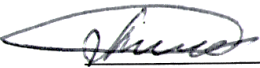
Specialty	211 Veterinary Medicine
Educational program	211 «Veterinary medicine»
Level of higher education	Second (master's)

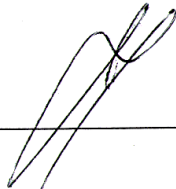
Sumy - 2024

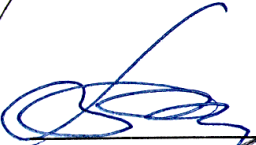
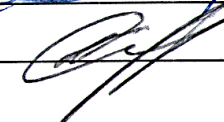
Developer:  **Musiienko Yurii, PhD, Associate Professor**

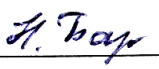
Considered, approved and approved at the meeting of the Department of Obstetrics and Surgery	Protocol dated 04.05.2024, №11
	Head of Department  Oksana Shkromada

Agreed:

Guarantor of the educational program  **Roman Petrov**

Dean of the Faculty,
where the educational program is implemented  **Oleksandr Nechyporenko**

Review of the work program (attached) provided by:  **Anatolii Fatim**
 **Oleksandr Stochiy**

Methodist of the Department of Education Quality,
licensing and accreditation  **H. Boy (Hajis Ivanovics)**
(signature) (full name)

Registered in the electronic database: date: 11.07 2024

1. GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

1.	Name OK	"Veterinary service of pig breeding"		
2.	Faculty chair	veterinary medicine, obstetrics and surgery		
3.	Status OK	Obligatory		
4.	Program / Specialty (programs), the component of which is OK for (<i>to be filled in for mandatory OK</i>)			
5.	OK can be suggested for (to be filled in for selective OK)	"Veterinary service of pig breeding" 211 «Veterinary medicine»		
6.	NRC level	NRC of Ukraine - level 8, QF-EHEA - second cycle, EQF-LLL - level 7		
7.	Semester and duration of study	7th semester 1-15 weeks		
8.	Number of ECTS credits	5		
9.	The total number of hours and their distribution	Contact work (classes)		Individual work
		Lectures	Practical / seminar	Laboratory
			4	146
10.	Language of instruction	Ukrainian		
11.	Teacher / Coordinator of the educational component	Ph.D., Associate Professor Grebenik Natalia Ph.D., Associate Professor Musiienko Yurii		
11.1	Contact Information	mobile phone +380500571090, e-mail - greb.nata@ukr.net		
12.	General description of the educational component	"Veterinary service of pig breeding" is one of the disciplines to ensure the acquisition of knowledge about veterinary service of pig breeding and especially their practical application. This knowledge is necessary for the full service of pig farming and the ability to apply theoretical knowledge and practical skills in specific situations that may arise in the maintenance of farms.		
13.	The purpose of the educational component	The purpose of OK is to form a comprehensive system of knowledge and practical skills in the applicant. To give knowledge about the peculiarities of veterinary service of pig breeding and methods of production.		
14.	Prerequisites for studying OK, the relationship with other educational components of OP	OK is based on theoretical knowledge acquired by the applicant in previous courses in such disciplines as Animal Physiology, Obstetrics, Gynecology and Biotechnology of Animal Reproduction, Veterinary Pharmacology, Animal Hygiene, Epizootology and Infectious Diseases, Parasitology and Invasive Diseases, Internal special surgery, Pathological anatomy and autopsy.		

2. LEARNING OUTCOMES OF THE EDUCATIONAL COMPONENT AND THEIR RELATIONSHIP WITH THE SOFTWARE LEARNING OUTCOMES

OK learning outcomes: After studying the educational component, the student is expected to be able to... »	Program learning outcomes to be achieved by the OK (indicate the number according to the numbering given in the OP) ¹					As estimated by RND
	PRN 7. To formulate conclusions on the effectiveness of selected methods and means of keeping, feeding and treatment of animals, prevention of infectious and non-communicable diseases, as well as production and technological processes at enterprises for keeping, breeding or operation of animals of different classes and species.	PRN 9 Ability to develop and implement measures to protect the population from diseases common to animals and humans.	PRN 10 . To offer and use expedient innovative methods and approaches of the decision of problem situations of a professional origin	PRN 17 Know the rules and requirements of biosafety, bioethics and animal welfare	. PRN 18 Carry out accounting reporting during professional activities	
DRN 1. Be able to plan, organize and implement measures for the treatment of animals suffering from non-communicable, infectious and invasive diseases.	X	X				Oral interview at the hospital Presentation of practical training
DRN 2. Be able to develop strategies for safe, sanitary keeping of animals.	X	X		X		Oral interview at the hospital (solving situational problems), work with animals
DRN 3. Be able to develop and implement measures to protect the population from diseases common to animals and humans.	X	X				Written survey at the hospital (solving situational problems), work with animals
DRN 4. Be able to develop strategies for disease prevention of various etiologies and document them.	X			X	X	Oral and written interview at the hospital, computer survey of students, keeping a diary

DRN 5. Be able to protect the environment from contamination by livestock waste, as well as materials and veterinary products.	x	x	x			Oral questioning in laboratory-practical classes,
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3. CONTENT OF THE EDUCATIONAL COMPONENT (PROGRAM OF THE COURSE)

Topic. List of issues to be addressed within the topic	Distribution within the total time budget			
	Classroom work			Alone at work
	Luke	Pz	Lz	
1. PROBLEMS OF BIOSECURITY AND BIOSECURITY.				14
2. LIVESTOCK MAINTENANCE AND MANAGEMENT				14
3. REPRODUCTIVE ABILITY OF BREEDERS - BREEDERS.				18
4. REPRODUCTIVE ABILITY OF SOWS.				16
5. TECHNOLOGY OF PIG REPRODUCTION.				14
6. ORGANIZATION OF NATURAL MATING AND ARTIFICIAL INSEMINATION OF PIGS			2	14
7. PHYSIOLOGY AND PATHOLOGY OF NEWBORN			2	14
8. ETHOLOGY AND WELFARE OF THE HERD				14
9. EPISOTHOLOGY AND INFECTIOUS DISEASES				14
10. VETERINARY SANITARY EXAMINATION				14
Total for the semester			4	146

4. TEACHING AND TEACHING METHODS

DRN	Teaching methods (work to be done by the teacher <u>during classes</u> , consultations)	Number of hours	Teaching methods (what types of educational activities the student must perform <u>independently</u>)	Number of hours
DRN 1	- presentation of the material to be considered within the topic according to the plan; - proposals for literature on each topic of lectures; - use of the Moodle, Zoom platform during the lesson.	10	- fixation (reading) of the material, - independent work during the research - solving situational problems,	20

DRN 2	- mandatory preparation for the hospital. - assimilation (processing) of material for the hospital. - consultations of students in the process of mastering OK according to the counseling schedule.	10	- fixation (reading) of the material, - mastering research methods	20
DRN 3	- presentation of the material to be considered within the topic according to the plan; - assimilation (processing) of material for the hospital. - discussion of the material of a new topic;	10	- fixation (reading) of the material. - independent work during the research	20
DRN 4	- mandatory preparation for the hospital. - assimilation (processing) of material for the hospital. - consultations of students in the process of mastering OK according to the counseling schedule.	10	- fixation (reading) of the material, - mastering research methods	30
DRN 5	- mandatory preparation for the hospital. - assimilation (processing) of material for the hospital. - consultations of students in the process of mastering OK according to the counseling schedule.	4	- fixation (reading) of the material, - mastering research methods	16

5. EVALUATION BY EDUCATIONAL COMPONENT

5.1. Diagnostic evaluation (indicated if necessary)

5.2. Summative assessment

5.2.1. To assess the expected learning outcomes provided

№	Methods of summative evaluation	Points / Weight in the overall score	Date of compilation
Spring semester			
1	Survey in laboratory-practical classes	50/50%	2, 4, 6, 8, 10, 12, 14
2	Keeping a diary	20 /20%	4, 8, 12
3	Presentation protection	30/30%	14 weeks (According to the schedule of modules)

5.2.2. Evaluation criteria

Distribution of points	Evaluation criteria
	Survey in laboratory-practical classes
5	The applicant of higher education has substantially prepared for the lesson, behaves actively, actively participates in the discussion on the topic of the lecture. Comprehensive, systematic and deep knowledge of the topic material is shown. The interrelation of the basic concepts of the topic and their significance for the future profession is mastered. Creative abilities in understanding and using theoretical material are shown.
3-4	Since the applicant for higher education is not sufficiently prepared for the lesson, takes part in discussions on the topic. Sufficient knowledge of the topic material is shown. The non-systematized nature of knowledge on the topic is shown. The answers to the questions are not complete.
0-2	The applicant has not prepared for the lesson, does not take part in the discussion on the topic of the lesson or is absent. Lack of knowledge of the main material of the topic or not answered.
	Keeping a diary
2	The synopsis is presented succinctly, consistently. The design of the work corresponds to 75-100%.
1	The synopsis is presented succinctly, consistently. The design of the work corresponds to 50-75%.
0	Missing.
	Presentation protection (photo or video presentation of practical skills)
3	The applicant of higher education has substantially prepared on the topic of the lesson (has a presentation with photo and video of practical skills).
2	The applicant for higher education is not sufficiently prepared on the topic of the lesson (no presentation)
0-1	The applicant did not prepare for the topic of the lesson.
	Form of semester control
	Test

5.3. Formative assessment:

To assess current progress in learning and understanding areas for further improvement

№	Elements of formative assessment	Date
1	Surveys in laboratory-practical classes,	According to the schedule
2	Diary and presentation design	Within a week until the end of the educational process

6. EDUCATIONAL RESOURCES (LITERATURE)

6.3. Main sources

6.3.1. Textbooks manual

1. Kharenko MI, Khomin SP Physiology, pathology and biotechnology of pig breeding / monograph. Sumy: OJSC "SOD", 2010. 412 p.
2. Kharenka MI Handbook of pharmacological agents in obstetrics, gynecology, andrology and biotechnology of animal reproduction. Kyiv: DIA, 2011. 255 p.
3. Yablonsky VA, Kalinovsky GM Veterinary obstetrics, gynecology and biotechnology of animal reproduction with basics of andrology / textbook. Vinnytsia: New book, 2011. 608 p.

6.3.2 Methodological support

4. Grebenik NP, Shkromada OI, Kraevsky AY, Musienko YV, Chekan OM, Bondarenko IV Terminological dictionary of obstetrics / Method. instructions. Sumy, 2019, 51 p.
5. Grebenik NP, Chekan OM, Bondarenko IV, Musienko Yu.V. Postpartum pathology in sows / Method. Sumy recommendations, 2017, 45 p.
6. Grebenik NP Measures of infertility prevention / Methodical instructions of Sumy, 2019, 24 p.
7. Grebenik NP Obstetrics, gynecology and biotechnology of animal reproduction / Consp. lectures. Sumy, 2015, 145 p.
8. Grebenik NP, Kharenko MI, Baidevlyatov YA, Parashchenko IV, Chekan OM Technology of animal reproduction / Methodical recommendations of Sumy, 2011, 92 p.
9. Grebenik NP, Kharenko MI, Baidevlyatov YA, Parashchenko IV, Chekan OM, Chernenko AA Situational tasks in obstetrics, gynecology and biotechnology of reproduction of farm animals and midwifery examination / Methodical recommendations of Sumy, 2011, 72 p.

6.3.3 Other sources

10. Electronic resource <http://library.sau.sumy.ua>
11. Electronic resource http://veterinary.net.ua/books/veterinarne-akusherstvo_ginekologiya-ta-biotehnologiya-vidtvorenniya-tvarin-z-osnovami
12. Electronic resource http://www.studmed.ru/yablonskiy-va-praktichne-akusherstvo-gnekologiya-ta-botehnologiya-vdtvorenniya-tvarin-z-osnovami_andrologyi_ace66ddb090.html

6.4 Additional sources

13. Veterinary obstetrics, gynecology and biotechnology of animal reproduction with the basics of andrology / [Yablonsky VA , Хомин С.П. , Kalinovsky GM etc.]. - Vinnytsia: Nova kinyha, 2011. - 608 p.
14. Cap. VV, Valchuk OA, Derkach SS, Zhuk Yu.V., Masalovich Yu.S. Biotechnological methods in veterinary reproductive medicine: a textbook. - Kyiv, NULES of Ukraine, 2020. - 102 p.
15. Lyubetsky VY, Zhuk YV, Valchuk OA, Derkach SS, Kovpak. V.V. Laboratory and functional diagnostics in veterinary obstetrics, gynecology and andrology: a textbook. - Kyiv, NULES of Ukraine, 2020. - 258 p.
16. Valchuk OA, Mazur VM, Kovpak VV, Derkach SS, Zhuk Yu.V. Methods of research in veterinary medicine: Textbook. - Kyiv: NULES of Ukraine, 2020. - 146 p.
17. Berezovsky AV, Kharenko MI, Lyubetsky VY, Koshevoy VP, Fotina TI, Zhelavsky MM, Sklyarov PM, Stravsky JS, Chekan O .M., Baidevlyatova Yu.V., Saletska OV, Zhuk Yu.V., Valchuk OA, Derkach SS, Fedorenko S.Ya., Luzan MP, Musienko Yu.V. , Dmitrov O.Ya., Kostyshyn EE, Khomutov SL Physiology and pathology of the mammary gland in animals: Textbook / for general. ed .. A.V. Berezovsky and MI Kharenka - K .: DIA, 2018. - 476 p.

6.5. Software

- Computers with software for practical work
- Microsoft Power Point - data visualization Microsoft Power BI - analytics and data visualization
- Multimedia projector, whiteboard and screen;
- Moodle distance learning and control system