

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
SUMY NATIONAL AGRARIAN UNIVERSITY**

**Department of Virology, Pathology and Poultry Diseases. prof. II Panikar**

**Faculty of Veterinary Medicine**

**MODULE SYLLABUS**

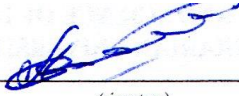
**Veterinary virology  
(compulsory)**

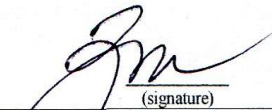
**Implemented in the “Veterinary Medicine” Academic Program**

**Area of specialization 211 “ Veterinary Medicine”**

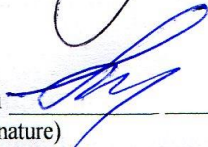
**at the second (master 's) level of higher education**

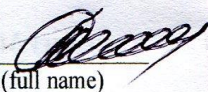
**Sumy - 2021**

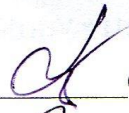
Developer:  Reshetilo OI., Ph.D., Associate Professor  
(signature) (sumame, initials) (academic degree and title, position)


Considered, approved and approved at the meeting of the department virology, pathoanatomy and diseases of poultry. prof. Panikara II	protocol from 8. 06. 2021 № 12
	 (signature) R. Petrov (sumame, initials)


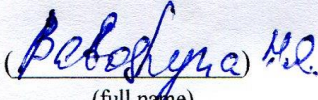
**Agreed:**

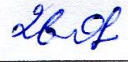
Guarantor of the educational program  Ulko L.  
(signature) (full name)

Dean of the Faculty,  
where the educational program is implemented  O. Nechiporenko  
(signature) (full name)

Work program review (attached) provided:  O. Shkromada  
(Full name)

 G. Zon  
(Full name)

Methodist of the Department of Education Quality,  
licensing and accreditation    
(signature) (full name)

Registered in the electronic database: date:  2021

**Syllabus review data:**

The academic year in which changes are made	The Academic program attachment number with changes description	Changes revised and approved		
		Minutes No and date of the department meeting	Head of Department	Guarantor of the Academic program

## 1. MODULE OVERVIEW

1.	Title	OK 22. Veterinaryvirology			
2.	Faculty/Department	Veterinarymedicine / virology, pathoanatomyandpoultrydiseases. prof. Panikara II			
3.	Type (compulsory or optional)	compulsory			
4.	Program(s) to which module is attached	Veterinarymedicine / 211 Veterinarymedicine			
5.	Level of the National Qualifications Framework	-			
6.	Semester and duration of module	NRC ofUkraine - level 7, QF-EHEA - secondcycle, EQF-LLL - level 7			
7.	ECTS credits number	5 semester, 18 weeks			
8.	Total workload and time allotment	3.0			
9.	Total workload and time allotment	Contactwork (classes)		Independentwork	
		Lectures	Practical / seminar	Laboratory	
		16		14	30
		14		16	30
10.	Language of instruction	English			
11.	Module leader	AlexanderIvanovichReshetilo			
11.1	Module leader contact information	mob. tel. +380991004548, e-mail <a href="mailto:reshetilooi@ukr.net">reshetilooi@ukr.net</a> <a href="https://vet.snau.edu.ua/kafedri/kafedra-ekonomiki/sklad-kafedri/reshetilo-oleksandr-ivanovich-k-vet-n-docent/">https://vet.snau.edu.ua/kafedri/kafedra-ekonomiki/sklad-kafedri/reshetilo-oleksandr-ivanovich-k-vet-n-docent/</a>			
12.	Module description	«VeterinaryVirology"- as a disciplinelaysthefoundationsofknowledgeaboutthenatureoftaxonomy; structure, chemicalstructureofviruses; reproductionandmethodsofculturingviruses; geneticsofviruses; acquaintancewiththepathogenesisofviral diseases; acquaintancewithfeaturesofantiviralimmunity, meansandmethodsofdiagnosticsandprevention			
13.	Module aim	Thepurposeoftheeducationalcomponentistheformationofstudents' deeptheoreticalknowledgeandpracticalskillsonthegeneralstructure, properties, biologicalroleofviruses, aswellasindividualrepresentativesofthemainfamiliesofviruses; featuresofthepathogenesisofviralinfections; featuresofimmunityandpreventionofviralinfectionsandrulesfordiagnosingviralinfections. Thestudyofthedisciplineproducesinstudentstheacquisitionoftheoreticalknowledge, theformationofprofessionalskillsandthedevelopmentofclinicalthinkinginthelaboratorydiagnosisofinfectiousdiseases.			
14.	Module Dependencies (prerequisites, co-requisites, incompatible modules)	Theeducationalcomponent, beingthebasisforclinicalsubjects, isbasedonthefoundationofgeneraltheoreticaldisciplines: VeterinaryMicrobiologyandImmunology, Cytology, Histology, Embryology, AnimalPhysiology			
15.	Thepolicyofacademicintegrity	Applicantsareexplainedthevalueofacquiringnewknowledge			

	grity	ge; valueandfunctionsofacademicintegrity; reporttheinadmissibilityofplagiarism, encourageindependentperformanceofeducationaltasks, correctreferencetosourcesofinformationinthecaseofborrowin gscientificmaterials. Write-offsduringtestsandexamsareprohibited (includingtheuseofmobiledevices). Papersshouldhavecorrecttextualreferencestothe literatureused . Forviolationofacademicintegrity, studentsmaybeheldsubjecttothefollowingacademicliability: Academicplagiarism - grade 0, re-completionofthetask. Academicfraud (writingoff, deception, publishingsomeone'sworkfortheirown) - cancellationofpoints; re-assessmentevaluationre- executionofnon- independentlyperformedworkwithnewsourcedata; Useofelectronicdevicesduringthefinalcontrolofknowledg e - suspensionfromwork, grade 0, re-passingthefinalcontrol
16.	Link in Moodle	<a href="https://cdn.snau.edu.ua/moodle/enrol/index.php?id=278">https://cdn.snau.edu.ua/moodle/enrol/index.php?id=278</a> <a href="https://cdn.snau.edu.ua/moodle/enrol/index.php?id=82">https://cdn.snau.edu.ua/moodle/enrol/index.php?id=82</a>

## 2. CORRELATION BETWEEN MODULE LEARNING OUTCOMES (MLOs) AND PROGRAM LEARNING OUTCOMES (PLOs)

MLOs: On successful completion of the module the learner will be able to:	PLOs		How assessed
	PLOs1	PLOs2	
MLOs 1. Know: safetyrulesandworkwithmaterialscontainingviruses. Virologylaboratoryequipment. Grind, homogenize, filter and dose the test material. Use: Seitzfilters, syringes, thermostat, othermodernlaboratorydevices Know: shape, sizeandultrastructureofviruses (genome, capsid, nucleocapsid, nucleoid, supercapsid), typesofsymmetryofviruses. Nucleicacidsofviruses. Takesamples, transportandcarryoutprimaryprocessingofpathologicalmaterialforvirologicalexamination; uselightandfluorescencemicroscopyinvirology. Use: centrifuges, homogenizers, filters, scales, syringes, dispensers; thermostat, lightandfluorescentmicroscopesandothermodernlaboratorydevices.	+	+	<ul style="list-style-type: none"> <li>- Oral control (participation in a discussion on the topic of the lecture)</li> <li>- Laboratory-practical control (performance of tasks on laboratory works)</li> <li>- Written control (performance of tasks on independent work, self-studyofthetopicas a wholeorindividualissuesofindependentwork (testresults, preparationofpresentations, presentationreportofself-developedmaterial))</li> <li>- Solvingsituationalproblems</li> </ul>
MLOs 2. Knowmorphology, antigenicstructure, cultivation, environmentalresistanceofrabiesviruses, Aujeszky'sdisease,	+	+	<ul style="list-style-type: none"> <li>- Oral control (participation in a discussion on the topic of the lecture)</li> <li>- Laboratory-practical control</li> </ul>

<p>mammalian and avian smallpox viruses, mammalian and avian influenza, foot and mouth disease, duck hepatitis, immunity and specific prevention. Carry out laboratory diagnosis of diseases that cause haemorrhagic viruses. Select, preserve pathogenic material, prepare a virus-containing suspension, detect viruses in pathogenic material by inclusion bodies and virions, infect laboratory animals and detect signs of virus replication in infected laboratory animals. Cultivate viruses in chicken embryos, cultivate viruses in cell culture (prepare primary cell culture and infect it with virus).</p>			<p>(performance of tasks on laboratory works)  - Written control (performance of tasks on independent work, self-study of the topics as a whole or individual issues of independent work (test results, preparation of presentations, presentation report of self-developed material))  - Solving situational problems</p>
<p>MLOs 3. Know the morphological, biological properties of infectious rhinotracheitis viruses, parainfluenza-3, cattle diarrhoea, bovine leukaemia, Tesch disease, classical and African swine fever, equine infectious anaemia and African equine plague. Carry out laboratory diagnosis of diseases that cause haemorrhagic viruses. Select virus-containing material, find the virus in virus-containing material. Make a preliminary diagnosis and carry out laboratory diagnosis of diseases in solving diagnostic problems.</p>	+	+	<p>- Oral control (participation in a discussion on the topic of the lecture)  - Laboratory-practical control (performance of tasks on laboratory works)  - Written control (performance of tasks on independent work, self-study of the topics as a whole or individual issues of independent work (test results, preparation of presentations, presentation report of self-developed material))  - Solving situational problems  - Final control (solving tests)</p>
<p>MLOs 4. Know the morphological, biological properties of Newcastle disease viruses, infectious laryngotracheitis and infectious bronchitis of birds, Rous sarcoma and avian leukaemia, plague and infectious hepatitis of dogs, myxomatosis and hemorrhagic disease of rabbits. Carry out laboratory diagnosis of diseases that cause haemorrhagic viruses, immunity and specific prevention. Titrate viruses for haemagglutination and infectious activity with the evaluation of a single effect and with a statistically evaluated effect, find the virus or antibodies to it in the material in RZGA, RZGad, RNGad, RDP. Detect, identify viruses or antibodies to them in PH, RNGA, RAL, RIF, ELISA, PCR.</p>	+	+	<p>- Oral control (participation in a discussion on the topic of the lecture)  - Laboratory-practical control (performance of tasks on laboratory works)  - Written control (performance of tasks on independent work, self-study of the topics as a whole or individual issues of independent work (test results, preparation of presentations, presentation report of self-developed material))  - Solving situational problems</p>

### 3. MODULE INDICATIVE CONTENT

Topic.	Distribution of hours				Learning resources
	Classroom work			Independent work	
	Lectures	Practicals	Labs		
4th semester					

<b>Topic 1.</b> Subject, methods and tasks of veterinary virology. The structure of simple and complex viruses. The chemical composition of viruses. Viral nucleic acids, proteins, carbohydrates, lipids. Forms of symmetry of viruses	2		2	2	[1, 7, 14, 17, 20]
<b>Topic 2.</b> Classification of viruses. Criteria for classification of viruses. Characteristics of families of DNA-genomic and RNA-genomic viruses	2			2	[1, 5, 9, 16, 19]
<b>Topic 3.</b> Reproduction of viruses. General concepts of virus reproduction. Stages of virus reproduction.	2			2	[1, 10, 12, 15, 20]
<b>Topic 4.</b> Genetics of viruses. Structure and functions of the viral gene. Heredity in viruses. Genetic traits of viruses. Methods of virus selection and production of live antiviral vaccines.	2			2	[2, 5, 9, 13, 18]
<b>Topic 5.</b> Pathogenesis of viral infections. Pathogenesis of viral infections at the cellular level. Pathogenesis of viral infections at the body level	2			2	[1, 6, 8, 17, 21]
<b>Topic 6.</b> Principles of laboratory diagnosis of viral diseases. Principles of virological research and its sequence.	2		8	10	[2, 4, 7, 10, 18]
<b>Topic 7.</b> Serological reactions in virology. Hemagglutination retention reaction (hemagglutination inhibition reaction). Neutralization reaction.			6	6	[3, 4, 8, 13, 20]
<b>Topic 8.</b> Rabies and Aujeszky's disease viruses. Laboratory diagnosis of viral diseases	2				[1, 7, 8, 10, 14]
<b>Topic 9.</b> Mammalian and avian smallpox viruses. Laboratory diagnosis of viral diseases				4	[1, 3, 8, 17, 19]
<b>5th semester</b>					
<b>Topic 7.</b> Serological reactions in virology. RIF, IFA.			6		[3, 4, 8, 13, 20]
<b>Topic 10.</b> Influenza viruses of mammals and birds. Laboratory diagnosis of viral diseases	2				[2, 4, 7, 13, 18]
<b>Topic 11.</b> Foot-and-mouth disease virus. Duck hepatitis virus. Laboratory diagnosis of viral diseases	2			2	[1, 3, 6, 12, 17]
<b>Topic 12.</b> Viruses of infectious rhinotracheitis, parainfluenza, cattle diarrhea. Laboratory diagnosis of viral diseases	2				[2, 4, 10, 11, 16]
<b>Topic 13.</b> Cattle leukemia virus. Virus of infectious anemia viruses and African equine plague.	2			6	[1, 6, 8, 14, 18]

Laboratory diagnosis of viral diseases					
<b>Topic 14.</b> Classical and African swine fever viruses. Tesch disease virus. Laboratory diagnosis of viral diseases	2				[1, 3, 9, 13, 21]
<b>Topic 15.</b> Molecular genetic methods for diagnosing viral diseases of animals. Polymerase chain reaction, its use in virology			2	6	[3, 4, 8, 11]
<b>Topic 16.</b> Newcastle disease virus. Infectious laryngotracheitis and avian infectious bronchitis viruses. Marek's disease viruses, avian leukemia.	4			2	[1, 5, 9, 16, 19]
<b>Topic 17.</b> Plague and hepatitis viruses in dogs. Viruses of myxomatosis and hemorrhagic disease of rabbits.	2			4	[3, 7, 10, 16, 18]
<b>Topic 18.</b> Laboratory diagnosis of viral diseases. The use of diagnostic kits in the diagnosis of viral diseases of animals. Solving diagnostic problems.			6	10	[4, 9, 10, 17, 21]
Total	30		30	60	

#### 4. TEACHING AND LEARNING METHODS

MLOs	Teaching methods (directed study)	hours	Learning methods (self-directed study)	hours
MLOs 1	Survey of students with explanation of key questions of the subject, answer to students' questions, mastery of practical skills, methods of laboratory work. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and figures. Working with real objects for virological research and models.	12	Independent processing of materials on the topic. Memorization of theoretical material, observation. On the basis of the studied and processed material Fr. drawing up a synopsis of independent work Acquaintance with the information of official sites on a subject of employment or a separate question. Solving situational problems	12
MLOs 2	Survey of students with explanation of key questions of the subject, answer to students' questions, mastery of practical skills, methods of laboratory work. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and figures. Working with real objects for virological research and	16	Independent processing of materials on the topic. Memorization of theoretical material, observation. On the basis of the studied and processed material Fr. drawing up a synopsis of independent work Acquaintance with the information of official sites on a subject of employment or a separate question.	16



	models.		Solving situational problems	
MLOs 3	Survey of students with explanation of key questions of the subject, answers to students' questions, mastery of practical skills, methods of laboratory work. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and figures. Working with real objects for virological research and models.	16	Independent processing of materials on the topic. Memorization of theoretical material, observation. On the basis of the studied and processed material Fr. drawing up a synopsis of independent work Acquaintance with the information of official sites on a subject of employment or a separate question. Solving situational problems	16
MLOs 4	Survey of students with explanation of key questions of the subject, answers to students' questions, mastery of practical skills, methods of laboratory work. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and figures. Working with real objects for virological research and models.	16	Independent processing of materials on the topic. Memorization of theoretical material, observation. On the basis of the studied and processed material Fr. drawing up a synopsis of independent work Acquaintance with the information of official sites on a subject of employment or a separate question. Solving situational problems	16

## 5. ASSESSMENT

### 5.1. Diagnostic assessment

### 5.2. Summative assessment

#### 5.2.1. Intended learning outcomes methods:

4th semester

№	Summative assessment methods	Grades	Deadline
1.	Oral control (participation in a discussion on the topic of the lecture)	30 points / 30%	Weekly
2.	Written control (performance of tasks on independent work).	15 points / 15%	According to the schedule
3.	Laboratory-practical control (performance of tasks on laboratory works) Solution of situational tasks	40 points / 40%	According to the schedule of the hospital
4.	Final control (solving tests)	15 points / 15%	According to the schedule of delivery of modules

5th semester

№	Summative assessment methods	Grades	Deadline
5	Oral control (participation in a discussion on the topic of the lecture)	30 points / 30%	Weekly

6.	Written control (performance of tasks on independent work).	15 points / 15%	According to the schedule
7.	Laboratory-practical control (performance of tasks on laboratory works) Solution of situational tasks	40 points / 40%	According to the schedule of the hospital
8.	Final control (solving tests)	15 points / 15%	According to the schedule of delivery of modules
9.	Examen	30 points / 30%	

### 5.2.2. Grading criteria

Summative assessment method	Unsatisfactory	Satisfactory	Good	Excellent
	<14 points	15-24 points	25-34 points	35-40 points
Thematic survey. Oral control	The student can play only individual fragments of the course.	The student has certain knowledge provided in the program of the discipline, has the basic provisions studied at a level that is defined as the minimum allowable	The student generally is well versed in the material, knows the basic provisions of the material, makes an analysis of possible situations based on them and is able to apply in solving typical practical problems, but admits some inaccuracies	The student demonstrates complete and solid knowledge of the educational material in the amount that corresponds to the program of the discipline, correctly and reasonably makes the necessary decisions in various non-standard situations.
	<9 points	10-19	20-29 points	30 points
Laboratory-practical control (performance of tasks on laboratory works) Solution of clinical and situational tasks	The student is not prepared to solve problems, the answer is incomplete, some components are missing or insufficiently disclosed	Most requirements are met, but some components are missing or insufficiently disclosed, there is no analysis of other approaches to the issue Using the basic theoretical provisions, the student has difficulty performing the task. Tasks are significantly formalized: there is a correspondence of the algorithm, but there is no deep understanding of the work	The student has mastered the basic material, and understands the solution of problems, has suggestions on their direction of their solutions. All the requirements of the task are met, but in violation of the methods	The task is performed methodically correctly and qualitatively. The student is able to implement the theoretical provisions of the discipline in practice When performing tasks, he showed the ability to solve tasks independently
	<5 points	5-8	8-14 points	15 points
Written control (performance of	The student does not have	Despite the fact that the student completed	Knows the characteristics of the main pr	When performing tasks,

tasks on independent work). Protection of the abstract from independent work	complete understanding of the material on the discipline. The student is not prepared to independently solve problems that outline the purpose and objectives of the discipline	the program of the discipline, he worked passively, his answers during the registration of work are mostly incorrect, unfounded	visions that are crucial in performing the design of tasks and explaining the decision made, within the discipline being studied. Errors in the answer are not systemic.	he showed the ability to solve tasks independently. The abstract is decorated with impeccably, logically arranged material with an understanding of the relationships of the process disclosed on this topic.
Multiple choice tests	The student gives the correct answer to several questions ( $\leq 33\%$ of the correct answers).	The student has some knowledge provided in the program of the discipline, has the basic provisions being studied and gives the correct answer to several questions (34-59% of correct answers).	The student is generally well versed in the material, knows the basic provisions of the material, and gives the correct answer to several questions (60-89% of the correct answers).	The student demonstrates complete and solid knowledge of the study material in the amount that corresponds to the program of the discipline, correctly answers the test questions (90-100% of correct answers).

### 5.3. Formative assessment

To assess current learning progress and understand areas for further improvement

№	Formative Assessment elements	Date
1	Oral interview students with an explanation of key questions of the subject, answers to students' questions, mastering practical skills (methods of laboratory work)	During the lesson
2	Oral feedback from the teacher while working on the solution of clinical and situational problems	During the lesson
3	Written feedback from the teacher after checking the synopsis with independent study of the discipline.	Within a week, after execution

## 6. LEARNING RESOURCES

### 6.1. The main sources

#### 6.1.1. Textbooks guide

1. Kalinina OS, Panikar II, Skibitsky VG Veterinary virology / OS Kalinina, II Panikar, VG Skibitsky. - K.: Higher education, 2004. - 432p.
2. Workshop on veterinary virology / II Panikar, VG Skibitsky, OS Kalinina - Sumy: Cossack shaft, 2007. - 236p.
3. Workshop on veterinary virology / VG Skibitsky, II Panikar, O.A. Tkachenko and others. - Kyiv: Higher Education, 2005. - 208p.
4. Workshop on special veterinary virology / II Panikar, GI Garagulya, Ig. Panikar - Sumy, 2005. - 84 p.
5. Surin VN, Solovyov BV, Fomina NV Viral diseases of animals / VN Surin, BV Solovyov, NV Fomina - M.: VNITIBP, 2008. - 928p.
6. Vlizlo VV, Slivinska LG, Maksimovich IA, Lenyo MI, Galyas VL Laboratory diagnostics in veterinary medicine: reference book. Lviv: Afisha, 2014. 152 p.

#### 6.1.2. Methodical support

5. Veterinary virology. Special virology: part 1 // Methodical instructions for conducting laboratory-practical classes / OI Reshetylo, OS Panasenko, VA Pedan - Sumy, 2012. - 23 p.
6. Veterinary virology. Special virology: part 2 // Methodical instructions for conducting laboratory-practical classes / OI Reshetylo, OS Panasenko, VA Pedan - Sumy, 2013. - 21 p.
7. Veterinary virology. Setting the reaction of indirect hemagglutination // Methodical instructions for laboratory-practical classes / OS Panasenko, OI Reshetylo, VA Pedan - Sumy, 2012. - 20 p.
8. Veterinary virology. ELISA production // Methodical instructions for conducting laboratory-practical classes / OI Reshetylo, OS Panasenko, VA Pedan - Sumy, 2013. - 28 p.
9. Veterinary virology. RIF production, direct and indirect method // Methodical instructions for conducting laboratory-practical classes / OI Reshetylo, OS Panasenko - Sumy, 2013. - 42 p.
10. Veterinary virology. Special virology: part 3. // Methodical instructions for conducting laboratory-practical classes on special veterinary virology EQL "Bachelor" part 3 serological reactions // OI Reshetylo, OS Panasenko. - Sumy, 2014 - 18 p.
11. Veterinary virology. Special virology / Methodical instructions for conducting laboratory-practical classes on veterinary virology (workbook for hospitals part 1) "for students of the Faculty of Veterinary Medicine in Russian // OI Reshetylo, OS Panasenko, VV Garkava. - Sumy, 2014 - 41 p.
12. Veterinary virology / Methodical instructions for conducting educational practice in the discipline "Veterinary virology" EQL "Bachelor" // OI Reshetylo, OS Panasenko - Sumy, 2014 - 22 p.
13. Veterinary Virology // Methodical instructions for lectures on the subject "Veterinary Virology" EQL "Bachelor" // OI Reshetylo, OS Panasenko - Sumy, 2016 - 93 p.
14. Veterinary virology / Guidelines to independent work in the discipline "Veterinary Virology" part 1 for students in the direction of training 211 "Veterinary Medicine", 212 "Veterinary Hygiene, Sanitation and Examination" EQL "Bachelor" of the Faculty of Veterinary Medicine // О.И.Решетило, О.С. Panasenko - Sumy, 2017 - 100 p.
15. Methodical instructions to independent work in the discipline "Veterinary Virology" part 2 for students majoring in 211 "Veterinary Medicine", 212 "Veterinary Hygiene, Sanitation and Expertise" educational degree "Bachelor" of the Faculty of Veterinary Medicine / О.И.Решетило, О.С. Panasenko - Sumy, 2018 - 125 p.

#### 6.1.3. Other sources

18. Workshop on veterinary virology / RV Belousova, NI Trotsenko, EA Preobrazhenskaya - <http://knigi.tr200.biz/index.php?id=3458193>
19. Veterinary virology / RG Gosmanov, NM Kolychev, VI Pleshakova - [http://e.lanbook.com/books/element.php.pl1\\_cid=25&pl1\\_id=569](http://e.lanbook.com/books/element.php.pl1_cid=25&pl1_id=569)

#### 6.2. Additional sources

20. Workshop on veterinary virology / NI Trotsenko, RV Belousova, EA Preobrazhenskaya - M.: Agropromizdat, 2009. - 287 p.
21. Surin VN, Fomina NV Private veterinary virology - reference book / VNSurin, NVFomina - M.: Kolos, 2006. - 472p.

#### 6.3. Software

- Microsoft PowerPoint - data visualization Microsoft Power BI - analytics and data visualization
- Multimedia projector, whiteboard and screen;

- Moodle distance learning and control system

## Рецензія на Робочу програму (силабус)

Параметр, за яким оцінюється робоча програма (силабус) освітнього компонента гарантом або членом проєктної групи	Так	Ні	Коментар
Результати навчання за освітнім компонентом (ДРН) відповідають НРК	+		
Результати навчання за освітнім компонентом (ДРН) відповідають передбаченим ПРН (для обов'язкових ОК)	+		
Результати навчання за освітнім компонентом дають можливість виміряти та оцінити рівень їх досягнення	+		

Член проєктної групи ОП \_\_\_\_\_ Школа О.І.

Параметр, за яким оцінюється робоча програма (силабус) освітнього компонента викладачем відповідної кафедри	Так	Ні	Коментар
Загальна інформація про освітній компонент є достатньою	+		
Результати навчання за освітнім компонентом (ДРН) відповідають НРК	+		
Результати навчання за освітнім компонентом (ДРН) дають можливість виміряти та оцінити рівень їх досягнення	+		
Результати навчання (ДРН) стосуються компетентностей студентів, а не змісту дисципліни (містять знання, уміння, навички, а не теми навчальної програми дисципліни)	+		
Зміст ОК сформовано відповідно до структурно-логічної схеми	+		
Навчальна активність (методи викладання та навчання) дає змогу студентам досягти очікуваних результатів навчання (ДРН)	+		
Освітній компонент передбачає навчання через дослідження, що є доцільним та достатнім для відповідного рівня вищої освіти	+		
Стратегія оцінювання в межах освітнього компонента відповідає політиці Університету/факультету	+		
Передбачені методи оцінювання дозволяють оцінити ступінь досягнення результатів навчання за освітнім компонентом	+		
Навантаження студентів є адекватним обсягу освітнього компонента	+		
Рекомендовані навчальні ресурси є достатніми для досягнення результатів навчання (ДРН)	+		
Література є актуальною	+		

Рецензент викладач кафедри вірусології, патанатомії та хвороб птиці, професор Зон.Г \_\_\_\_\_  
 (назва) (посада, ПІБ) (підпис)