

**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

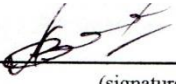
Veterinary virology
(compulsory)

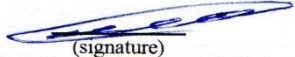
Implemented in the “Veterinary Medicine” Academic Program

Area of specialization 211 “ Veterinary Medicine”

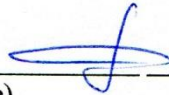
at the second (master 's) level of higher education

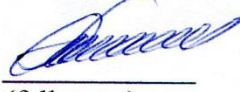
Sumy - 2022

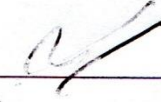

Developer:  Reshetilo OI., Ph.D., Associate Professor
(signature) (surname, initials) (academic degree and title, position)


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|--|--|
| Considered, approved and approved at the meeting of the department virology, pathoanatomy and diseases of poultry. prof. Panikara II | protocol from 15. 06. 2022 № 12 |
| | The head departments <u></u> <u>R. Petrov</u> (signature) (surname, 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  (N. Baranik)
(signature) (full name)

Registered in the electronic database: date: 29. 06. 2022

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 |
| | | | | |
| | | | | |
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1. MODULE OVERVIEW

| | | | | |
|------|--|---|---------------------|------------------|
| 1. | Title | OK 22. Veterinary virology | | |
| 2. | Faculty/Department | Veterinary medicine / virology, pathoanatomy and poultry diseases. prof. Panikara II | | |
| 3. | Type (compulsory or optional) | compulsory | | |
| 4. | Program(s) to which module is attached | Veterinary medicine / 211 Veterinary medicine | | |
| 5. | Level of the National Qualifications Framework | - | | |
| 6. | Semester and duration of module | NRC of Ukraine - level 7, QF-EHEA - second cycle, EQF-LLL - level 7 | | |
| 7. | ECTS credits number | 5 semester, 18 weeks | | |
| 8. | Total workload and time allotment | 5.0 | | |
| 9. | Total workload and time allotment | Contact work (classes) | | Independent work |
| | | Lectures | Practical / seminar | Laboratory |
| | | 30 | | 46 |
| | | | 74 | |
| 10. | Language of instruction | English | | |
| 11. | Module leader | Alexander Ivanovich Reshetilo | | |
| 11.1 | Module leader contact information | mob. tel. +380991004548, e-mail reshetilooi@ukr.net https://vet.snau.edu.ua/kafedri/kafedra-ekonomiki/sklad-kafedri/reshetilo-oleksandr-ivanovich-k-vet-n-docent/ | | |
| 12. | Module description | «Veterinary Virology"- as a discipline lays the foundations of knowledge about the nature of taxonomy; structure, chemical structure of viruses; reproduction and methods of culturing viruses; genetics of viruses; acquaintance with the pathogenesis of viral diseases; acquaintance with features of antiviral immunity, means and methods of diagnostics and prevention | | |
| 13. | Module aim | The purpose of the educational component is the formation of students' deep theoretical knowledge and practical skills on the general structure, properties, biological role of viruses, as well as individual representatives of the main families of viruses; features of the pathogenesis of viral infections; features of immunity and prevention of viral infections and rules for diagnosing viral infections. The study of the discipline produces in students the acquisition of theoretical knowledge, the formation of professional skills and the development of clinical thinking in the laboratory diagnosis of infectious diseases. | | |
| 14. | Module Dependencies (prerequisites, co-requisites, incompatible modules) | The educational component, being the basis for clinical subjects, is based on the foundation of general theoretical disciplines: Veterinary Microbiology and Immunology, Cytology, Histology, Embryology, Animal Physiology | | |
| 15. | The policy of academic integrity | Applicants are explained the value of acquiring new knowledge; value and functions of academic integrity; report the inadmissibility of plagiarism, encourage | | |

| | | |
|-----|----------------|---|
| | | <p>independent performance of educational tasks, correct reference to sources of information in the case of borrowing scientific materials. Write-offs during tests and exams are prohibited (including the use of mobile devices). Papers should have correct textual references to the literature used.</p> <p>For violation of academic integrity, students may be held subject to the following academic liability:</p> <p>Academic plagiarism - grade 0, re-completion of the task.</p> <p>Academic fraud (writing off, deception, publishing someone's work for their own) - cancellation of points; re-assessment evaluation re-execution of non-independently performed work with new source data;</p> <p>Use of electronic devices during the final control of knowledge - suspension from work, grade 0, re-passing the final control</p> |
| 16. | Link in Moodle | https://cdn.snau.edu.ua/moodle/enrol/index.php?id=278 https://cdn.snau.edu.ua/moodle/enrol/index.php?id=82 |

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 | |
| <p>MLOs 1. Know: safety rules and work with materials containing viruses. Virology laboratory equipment.</p> <p>Grind, homogenize, filter and dose the test material.</p> <p>Use: Seitz filters, syringes, thermostat, other modern laboratory devices</p> <p>Know: shape, size and ultrastructure of viruses (genome, capsid, nucleocapsid, nucleoid, supercapsid), types of symmetry of viruses. Nucleic acids of viruses.</p> <p>Take samples, transport and carry out primary processing of pathological material for virological examination; use light and fluorescence microscopy in virology.</p> <p>Use: centrifuges, homogenizers, filters, scales, syringes, dispensers; thermostat, light and fluorescent microscopes and other modern laboratory devices.</p> | + | + | <ul style="list-style-type: none"> - 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 topic as a whole or individual issues of independent work (test results, preparation of presentations, presentation report of self-developed material)) - Solving situational problems |
| <p>MLOs 2. Know morphology, antigenic structure, cultivation, environmental resistance of rabies viruses, Aujeszky's disease, 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 the above viruses.</p> | + | + | <ul style="list-style-type: none"> - 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, |

| | | | |
|--|---|---|--|
| Select, preserve patmaterial, prepare a virus-containing suspension, detect viruses in patmaterial 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). | | | self-study of the topic as a whole or individual issues of independent work (test results, preparation of presentations, presentation report of self-developed material)) - Solving situational problems |
| MLOs 3. Know the morphological, biological properties of infectious rhinotracheitis viruses, parainfluenza-3, cattle diarrhea, bovine leukemia, Teschen disease, classical and African swine fever, equine infectious anemia and African equine plague. Carry out laboratory diagnosis of diseases that cause the above 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. | + | + | - 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 topic 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) |
| MLOs 4. Know the morphological, biological properties of Newcastle disease viruses, infectious laryngotracheitis and infectious bronchitis of birds, Rouse's sarcoma and avian leukemia, plague and infectious hepatitis of dogs, myxomatosis and hemorrhagic disease of rabbits. Carry out laboratory diagnosis of diseases that cause the above viruses, immunity and specific prevention. Titrate viruses for hemagglutination and infectious activity with 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. | + | + | - 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 topic as a whole or individual issues of independent work (test results, preparation of presentations, presentation report of self-developed material)) - Solving situational problems |

3. MODULE INDICATIVE CONTENT

| Topic. | Distribution of hours | | | | Learning resources |
|--|-----------------------|-------------|------|------------------|--------------------|
| | Classroom work | | | Independent work | |
| | Lect ures | Practi cals | Labs | | |
| 5th semester | | | | | |
| Topic 1. 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] |

| | | | | | |
|---|---|--|----|----|---------------------|
| Topic 2. 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] |
| Topic 3. Reproduction of viruses. General concepts of virus reproduction. Stages of virus reproduction. | 2 | | | 2 | [1, 10, 12, 15, 20] |
| Topic 4. 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] |
| Topic 5. 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] |
| Topic 6. Principles of laboratory diagnosis of viral diseases. Principles of virological research and its sequence. | 2 | | 16 | 10 | [2, 4, 7, 10, 18] |
| Topic 7. Serological reactions in virology. Hemagglutination retention reaction (hemagglutination inhibition reaction). Neutralization reaction. Serological reactions in virology. RIF, IFA. | | | 16 | 6 | [3, 4, 8, 13, 20] |
| Topic 8. Rabies and Aujeszky's disease viruses. Laboratory diagnosis of viral diseases | 2 | | | 2 | [1, 7, 8, 10, 14] |
| Topic 9. Mammalian and avian smallpox viruses. Laboratory diagnosis of viral diseases | | | | 4 | [1, 3, 8, 17, 19] |
| Topic 10. Influenza viruses of mammals and birds. Laboratory diagnosis of viral diseases | 2 | | | 2 | [2, 4, 7, 13, 18] |
| Topic 11. Foot-and-mouth disease virus. Duck hepatitis virus. Laboratory diagnosis of viral diseases | 2 | | | 2 | [1, 3, 6, 12, 17] |
| Topic 12. Viruses of infectious rhinotracheitis, parainfluenza, cattle diarrhea. Laboratory diagnosis of viral diseases | 2 | | | 2 | [2, 4, 10, 11, 16] |
| Topic 13. Cattle leukemia virus. Virus infectious anemia viruses and African equine plague. Laboratory diagnosis of viral diseases | 2 | | | 6 | [1, 6, 8, 14, 18] |
| Topic 14. Classical and African swine fever viruses. Teschen disease virus. Laboratory diagnosis of viral diseases | 2 | | | 4 | [1, 3, 9, 13, 21] |
| Topic 15. Molecular genetic methods for diagnosing viral diseases of animals. Polymerase chain reaction, its use in virology | | | 4 | 6 | [3, 4, 8, 11] |
| Topic 16. Newcastle disease virus. Infectious laryngotracheitis and avian | 4 | | | 4 | [1, 5, 9, 16, 19] |

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|---|-----------|---|-----------|--------------------|
| infectious bronchitis viruses. Marek's disease viruses, avian leukemia. | | | | |
| Topic 17. Plague and hepatitis viruses in dogs. Viruses of myxomatosis and hemorrhagic disease of rabbits. | 2 | | 4 | [3, 7, 10, 16, 18] |
| Topic 18. Laboratory diagnosis of viral diseases. The use of diagnostic kits in the diagnosis of viral diseases of animals. Solving diagnostic problems. | | 8 | 12 | [4, 9, 10, 17, 21] |
| Total | 30 | | 46 | 74 |

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, 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. | 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, 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 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 | 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 | 16 |

| | | | | |
|--------|---|----|--|----|
| | diagrams and figures. Working with real objects for virological research and models. | | on a subject of employment or a separate question. Solving situational problems | |
| 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:

5th 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 |
| 5. | 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 | The student in general is well versed in the material, knows the basic provisions of the material, makes an analysis of possible situations | The student demonstrates complete and solid knowledge of the educational material in the amount that corresponds to the program of the |

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| | | allowable | based on them and is able to apply in solving typical practical problems, but admits some inaccuracies | discipline, correctly and reasonably makes the necessary decisions in various non-standard situations. |
| | <i><9 points</i> | <i>10-19</i> | <i>20-29 points</i> | <i>30 points</i> |
| 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 insufficient to disclose | 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 the 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 |
| | <i><5 points</i> | <i>5-8</i> | <i>8-14 points</i> | <i>15 points</i> |
| Written control (performance of tasks on independent work). Protection of the abstract from independent work | The student does not have a 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 | Despite the fact that the student completed the program of the discipline, he worked passively, his answers during the registration of works are mostly incorrect, unfounded | Knows the characteristics of the main provisions that are crucial in performing the design of tasks and explaining the decisions made, within the discipline being studied. Errors in the answers are not systemic. | When performing tasks, 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 processes 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 | The student is generally well versed in the material, knows the basic provisions of the material, and gives the correct answer to several | The student demonstrates complete and solid knowledge of the study material in the amount that corresponds to the program of the discipline, correctly |

| | | | | |
|--|--|--|--|--|
| | | questions (34-59% of correct answers). | questions (60-89% of the correct answers). | answers the test questions (90-100% of correct answers). |
|--|--|--|--|--|

5.3. Formative assessment

To assess current learning progress and understand areas for further improvement

| No | 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 / VNSurin, 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 Reshetilo, 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 Reshetilo, OS Panasenko - Sumy, 2014 - 22 p.
 13. Veterinary Virology // Methodical instructions for lectures on the subject "Veterinary Virology" EQL "Bachelor" // OI Reshetilo, 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

16. Workshop on veterinary virology / RV Belousova, NI Trotsenko, EA Preobrazhenskaya - <http://knigi.tr200.biz/index.php?id=3458193>
17. Veterinary virology / RG Gosmanov, NM Kolychev, VI Pleshakova - http://e.lanbook.com/books/element.php.pl1_cid=25&pl1_id=569

6.2. Additional sources

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

6.3. Software

- Microsoft Power Point - 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 _____ Шкромада 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 | + | | |

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