WORKING COURSE SYLLABUS

Veterinary and sanitary examination

Recommended by the Methodological Council for the Education Field:

36.05.01 Veterinary medicine
1. GOALS AND OBJECTIVES OF THE DISCIPLINE

The aim of mastering the discipline «Veterinary and sanitary examination» is to provide students with theoretical knowledge, practical skills and abilities on sanitary and hygienic control and rules of veterinary and sanitary evaluation of livestock and crop products, on the basics of technology and standardization in production.

2. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

The development of the discipline "Veterinary and sanitary examination" is aimed at creating the following competencies (parts of competencies) for students:

<table>
<thead>
<tr>
<th>Code</th>
<th>Competence</th>
<th>Indicators of competence accomplishment (within the discipline)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK-1</td>
<td>The ability to carry out a critical analysis of problem situations based on a systematic approach, to develop a strategy of action.</td>
<td>UK-1.1 Analyzes the task, highlighting its basic components; UK-1.2 Defines and ranks the information required to solve the task; UK -1.3 Searches for information to solve the task by various types of queries; UK-1.4 Offers solutions to the problem, analyzes the possible consequences of their use; UK -1.5 Analyzes the ways of solving problems of a philosophical, moral and personal nature based on the use of basic philosophical ideas and categories in their historical development and socio-cultural development.</td>
</tr>
<tr>
<td>UK-10</td>
<td>The ability to make informed economic decisions in various areas of life</td>
<td>UK -10.1 Understands the basic principles of the functioning of the economy and economic development, the goals of the form of state participation in the economy; UK -10.2 Applies methods of personal economic and financial planning to achieve current and long-term financial goals; UK -10.3 Uses financial instruments to manage personal finances (personal budget), controls its own economic and financial risks.</td>
</tr>
<tr>
<td>GPC-5</td>
<td>The ability to draw up special documentation, analyze the results of professional activity and submit accounting statements</td>
<td>GPC-5.1 Has the skills to search for the necessary forms of documentation on official websites and in specialized databases.</td>
</tr>
<tr>
<td>PC -19</td>
<td>The ability to perform post-mortem diagnostic examination of animals in order to establish pathological processes, diseases, causes of death.</td>
<td>PC-19.1 Able to conduct a general examination of animal corpses before autopsy.</td>
</tr>
<tr>
<td>PC -23</td>
<td>The ability to analyze the effectiveness of measures for the prevention of animal diseases in order to improve them.</td>
<td>PC-23.1 He is capable of collecting and analyzing information, including veterinary statistics data, necessary to assess the effectiveness of preventive antiepizootic measures, prevention of non-infectious animal diseases, veterinary and sanitary measures.</td>
</tr>
</tbody>
</table>
PC -23.3 He is able to make suggestions on the correction of measures for the prevention of animal diseases on the basis of the analysis carried out.

3. COURSE IN HIGHER EDUCATION

The discipline "Veterinary and sanitary examination" refers to the mandatory part of block B1 of the Educational Program of Higher Education.

As part of the Educational Program of Higher Education, students also master other disciplines and/or practices that contribute to achieving the planned results of mastering the discipline "Veterinary and sanitary examination".

Table 3.1. List of Higher Education Program components disciplines that contribute to expected learning outcomes

<table>
<thead>
<tr>
<th>Competence code</th>
<th>Competence</th>
<th>Previous Disciplines (Modules)</th>
<th>Subsequent Disciplines (Modules)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK-1</td>
<td>The ability to carry out a critical analysis of problem situations based on a systematic approach, to develop a strategy of action.</td>
<td>History Philosophy Life safety Obstetrics, gynecology and andrology Internal diseases General surgery Private Veterinary Surgery Parasitology and invasive diseases Epizootology and infectious diseases</td>
<td>Organization of veterinary affairs Maths Fundamentals of Economics and Management Veterinary deontology The basics of intellectual work Zoopsychology Organization of state veterinary supervision Career management Space technologies at the service of the agro-industrial complex Reconstructive surgery</td>
</tr>
<tr>
<td>UK-10</td>
<td>The ability to make informed economic decisions in various areas of life</td>
<td>-</td>
<td>Organization of veterinary affairs Maths Fundamentals of Economics and Management Economics and organization of agricultural production Veterinary and industrial laboratories with design basics</td>
</tr>
</tbody>
</table>
| GPC -5 | The ability to draw up special documentation, analyze the results of professional activity and submit accounting documents using specialized databases. | Veterinary genetics  
Computer science  
Breeding with the basics of private animal husbandry  
Clinical diagnostics  
Pathological anatomy  
Operative surgery with topographic anatomy  
Instrumental diagnostic methods  
Obstetrics, gynecology and andrology  
Internal diseases  
Parasitology and invasive diseases  
Epizootology and infectious diseases | Organization of veterinary affairs  
Forensic veterinary examination and dissection of animals  
Veterinary deontology  
Economics and organization of agricultural production  
Clinical laboratory diagnostics  
Laboratory diagnostics of infectious and invasive diseases  
Organization of state veterinary supervision  
Veterinary and industrial laboratories with design basics  
Anesthesiology, resuscitation and intensive care  
Dermatology  
Cardiology  
Endocrinology  
Nephrology |
|---|---|---|
| GPC -6 | The ability to analyze, identify and assess the risk of occurrence and spread of diseases. | Biology with the basics of ecology  
Life safety  
Veterinary  
Microbiology and Mycology  
Virology and biotechnology  
Animal health and welfare  
Feeding animals with the basics of forage production  
Veterinary radiobiology  
Clinical diagnostics  
Pathological anatomy  
Instrumental diagnostic methods  
Toxicology | Organization of veterinary affairs  
Forensic veterinary examination and dissection of animals  
Introduction to the specialty  
General and Veterinary Ecology  
Veterinary sanitation  
Processing technology for livestock products  
Medicinal and poisonous plants  
Fodder plants  
Animal health and welfare  
Clinical laboratory diagnostics  
Laboratory diagnostics of infectious and invasive diseases |
| PC -19 | The ability to perform post-mortem diagnostic examination of animals in order to establish pathological processes, diseases, causes of death. | Animal anatomy  
Cytology, Histology and Embryology  
Life safety  
Pathological anatomy  
Toxicology  
Obstetrics, gynecology and andrology  
Internal diseases  
General surgery  
Private Veterinary Surgery  
Parasitology and invasive diseases  
Epizootology and infectious diseases | Forensic veterinary examination and dissection of animals  
Clinical laboratory diagnostics  
Laboratory diagnostics of infectious and invasive diseases  
Horse diseases  
Diseases of Productive Animals  
Diseases of small pets  
Diseases of bees and entomophages  
Fish pathology and aquaculture  
Diseases of exotic animals  
Dermatology  
Cardiology  
Endocrinology  
Nephrology  
Veterinary ophthalmology  
Animal Dentistry |
| PC -23 | The ability to analyze the effectiveness of measures for the breeding with the basics of private animal husbandry | Breeding with the basics of private animal husbandry | Organization of veterinary affairs |
4. COURSE WORKLOAD AND TRAINING ACTIVITIES

Course workload of the discipline "Veterinary and sanitary examination" is 6 credits.

Table 4.1. Types of academic activities during the period of the HE program mastering for full-time study

<table>
<thead>
<tr>
<th>Types of academic activities</th>
<th>HOURS</th>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact academic hours</td>
<td>108</td>
<td>54 54 - -</td>
</tr>
<tr>
<td>including</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lectures</td>
<td>36</td>
<td>18 18 - -</td>
</tr>
<tr>
<td>Lab work</td>
<td>72</td>
<td>36 36 - -</td>
</tr>
<tr>
<td>Seminars (workshops/tutorials)</td>
<td>-</td>
<td>- - - -</td>
</tr>
<tr>
<td>Self-study</td>
<td>90</td>
<td>44 46 - -</td>
</tr>
<tr>
<td>Evaluation and assessment (exam/pass/fail grading)</td>
<td>18</td>
<td>10 8 - -</td>
</tr>
<tr>
<td>Course workload</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic hour.</td>
<td>216</td>
<td>108 108 - -</td>
</tr>
<tr>
<td>Credit unit</td>
<td>6</td>
<td>3 3 - -</td>
</tr>
</tbody>
</table>

Table 4.2. Types of academic activities during the period of the HE program mastering for part-time study

<table>
<thead>
<tr>
<th>Types of academic activities</th>
<th>HOURS</th>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>9 - -</td>
</tr>
</tbody>
</table>
5. CONTENT OF THE DISCIPLINE

Table 5.1 Content of the discipline (module) by type of academic work

<table>
<thead>
<tr>
<th>Name of the discipline section</th>
<th>Content of the section (topics)</th>
<th>Types of academic activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1. Basics of veterinary and sanitary expertise.</strong></td>
<td><strong>Topic 1.1</strong> Transportation of animals to slaughterhouses.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td></td>
<td><strong>Topic 1.2</strong> Pre-slaughter housing of animals and its importance.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td></td>
<td><strong>Topic 1.3</strong> Animal processing plants and veterinary and sanitary requirements for them.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td><strong>Section 2. Fundamentals of technology and hygiene of animal processing.</strong></td>
<td><strong>Topic 2.1</strong> Fundamentals of technology and hygiene of animal processing.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td></td>
<td><strong>Topic 2.2</strong> Organization and methods of inspection of heads, carcasses and internal organs.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td></td>
<td><strong>Topic 2.3</strong> Meat changes due to improper storage.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td></td>
<td><strong>Topic 2.4</strong> Basics of technology and hygiene for preserving meat and meat products.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td></td>
<td><strong>Topic 2.5</strong> Basics of technology, hygiene and veterinary and sanitary expertise of sausages and ham products.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td></td>
<td><strong>Topic 2.6</strong> Basics of technology, hygiene of poultry processing and inspection methods of carcasses and internal organs.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td><strong>Section 3. Veterinary and sanitary examination of</strong></td>
<td><strong>Topic 3.1</strong> Veterinary and sanitary examination of animal slaughter products for infectious diseases.</td>
<td>Lectures, Lab work.</td>
</tr>
<tr>
<td>Topic 3.2 Veterinary and sanitary examination of animal slaughter products for invasive diseases.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 3.3 Sanitary and veterinary expertise of slaughter products for non-communicable diseases, animal poisoning, antibiotic treatment and radioactive substances.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 3.4 Veterinary and sanitary examination of poultry, rabbits and nutria meat.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Theme 3.5 Veterinary and sanitary examination of eggs, fish and meat of wild animals.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 3.6 Animal health expertise of meat, meat and other animal products, plant food products.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 3.7 Animal health and sanitary examination of milk and dairy products.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 3.8 Animal health and sanitary examination of honey.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 3.9 Nutritional value of mushrooms and their classification.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 4.1 Fundamentals of technology and hygiene in canning meat and meat products.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 4.2 Preservation of meat and meat products at low temperature.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 4.3 Preserving meat and meat products at high temperature.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Theme 4.4 Preserving meat by salting.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
<tr>
<td>Topic 4.5 New methods of preserving meat.</td>
<td>Lectures, Lab work.</td>
<td></td>
</tr>
</tbody>
</table>

### 6. CLASSROOM INFRASTRUCTURE AND TECHNOLOGY SUPPORT REQUIREMENTS

**Table 6.1. Material and technical support of the discipline**

<table>
<thead>
<tr>
<th>Classroom for Academic Activity Type</th>
<th>Equipping the classroom</th>
<th>Specialized educational/laboratory equipment, software and materials for the development of the discipline (if necessary)</th>
</tr>
</thead>
</table>
Lecture
An auditorium for conducting lecture-type classes, equipped with a set of specialized furniture; a board (screen) and technical means of multimedia presentations.
- Information stands.
- Biological microscopes.

Laboratory
An auditorium for laboratory work, individual consultations, routine monitoring and interim certification, equipped with a set of specialized furniture and equipment.
- Information stands.
- Biological microscopes.

Self-studies
An auditorium for independent work of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to an electronic information and educational environment.

7. RECOMMENDED SOURCES FOR COURSE STUDIES

Main reading:


Additional Reading:

5. RAGS - RUSSIAN ARCHIVE OF STATE STANDARDS, as well as construction norms and rules (SNiP) and samples of legal documents // http://www.rags.ru URL: http://www.rags.ru RUSSIAN ARCHIVE OF STATE STANDARDS (RASGS), SNiPs and samples of legal documents _ Website of RANEPA (RASGS, ANH)

Resources of the Internet information and telecommunication network:

1. Electronic library system of RUDN and third-party Electronic library systems to which university students have access on the basis of concluded contracts:
   - Electronic library system of RUDN - ELS RUDN http://lib.rudn.ru/MegaPro/Web
   - ELS "University Library online"http://www.biblioclub.ru
   - ELS Yurayt http://www.biblio-online.ru
   - ELS "Student Consultant"www.studentlibrary.ru
   - ELS "Lan"http://eZlanbook.com/
   - ELS "Trinity Bridge"http://www.trmost.com/
2. Databases and search engines:
   - electronic fund of legal and regulatory and technical documentation http://docs.cntd.ru/
   - search engine Yandex https://www.yandex.ru/
   - search engine Google https://www.google.ru/
   - abstract database SCOPUS http://www.elsevierscience.ru/products/scopus/

Educational and methodological materials for independent work of students during the development of the discipline/module*:

   1. A course of lectures on the discipline "Veterinary and sanitary examination".
   2. Laboratory workshop on the discipline "Veterinary and sanitary examination".

* - All educational and methodological materials for independent work of students are placed in accordance with the current procedure on the discipline page in the Telecommunication educational and Information System!

8. MID-TERM ASSESSMENT

Evaluation materials and a point-rating system* for assessing the level of competence formation (part of competencies) based on the results of mastering the discipline "Veterinary and sanitary examination" are presented in the Appendix to this Work Program of the discipline.
* - Assessment Materials and a Point Rating System are formed based on the requirements of the relevant local regulatory act of the RUDN.

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