

Документ подписан простой электронной подписью
Информация о владельце:
ФИО: Ястребов Олег Александрович
Должность: Ректор
Дата подписания: 19.05.2023 16:30:35
Уникальный программный ключ:
ca953a0120d891083f939673078ef1a989dae18a

**Federal State Autonomous Educational Institution of Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
RUDN University**

Agrarian and Technological Institute

educational division (faculty/institute/academy) as higher education programme developer

COURSE SYLLABUS

Processing technology for livestock products

course title

Recommended by the Didactic Council for the Education Field of:

36.05.01 Veterinary

field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

36.05.01 Veterinary

higher education programme profile/specialisation title

1. GOALS AND OBJECTIVES OF THE COURSE

The aim of the mastering the course "**Processing technology for livestock products**" is to develop students' theoretical knowledge and practical skills on technologies for processing basic livestock products obtained from meat, milk at enterprises for processing products and raw materials of animal origin and ensuring the release of good-quality products.

2. REQUIREMENTS FOR LEARNING OUTCOMES

The implementation of the course "**Processing technology for livestock products**" is aimed at creating the following competencies (parts of competencies) for students:

Table 2.1. List of competencies formed by students during the development of the course (results of the development of the course)

| Competence code | Competence descriptor | Indicators of competence accomplishment (within the course) |
|-----------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| GPC-6 | Capable of analyzing, identifying, and assessing the risk of disease emergence and spread | GPC-6.3 Assesses the risks of the impact of human economic activity on the spread of animal and human diseases. |

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course "**Processing technology for livestock products**" 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 courses and /or practices that contribute to achieving the planned results of mastering the course "**Processing technology for livestock products**".

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

| Competence code | Competence descriptor | Previous courses/modules, internships* | Subsequent courses/modules, internships* |
|-----------------|-------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| GPC-6 | Capable of analyzing, identifying, and assessing the risk of disease emergence and spread | Veterinary and sanitary examination | Clinical internship Industrial practice Academic research practice with the preparation of a scientific qualification project |

| | | | |
|--|--|--|--------------------------------------------|
| | | | Preparation for and passing the state exam |
|--|--|--|--------------------------------------------|

4. COURSE WORKLOAD AND TRAINING ACTIVITIES

Course workload of the course "Processing technology for livestock products" is 3 credits.

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

| Types of academic activities | | HOURS | Semesters | | | | |
|----------------------------------------------------|--|---------------|------------|------------|---|---|---|
| | | | 7 | - | - | - | |
| Contact academic hours | | 51 | 51 | - | - | - | |
| including | | | | | | | |
| Lectures | | 17 | 17 | - | - | - | |
| Lab work | | 34 | 34 | - | - | - | |
| Seminars (workshops/tutorials) | | - | - | - | - | - | |
| Self-study | | 37 | 37 | - | - | - | |
| Evaluation and assessment (exam/pass/fail grading) | | 20 | 20 | - | - | - | |
| Course workload | | Academic hour | 108 | 108 | - | - | - |
| | | Credit unit | 3 | 3 | - | - | - |

5. COURSE CONTENTS

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

| Modules | Content of the modules (topics) | Types of academic activities |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------|
| Module 1. Meat production in the world and in Russia. History of the meat industry | Topic 1.1 Meat production by animal species and continent. | Lectures, Lab work |
| | Topic 1.2 Development of the meat industry in the 19th and 21st centuries. | Lectures, Lab work |
| Module 2. Types of meat processing plants | Topic 2.1 Sanitary and economic value of animal processing. | Lectures, Lab work |
| | Topic 2.2 Meat processing plants, slaughterhouses, slaughterhouses, poultry slaughterhouses, slaughterhouses. | Lectures, Lab work |
| Module 3. Preparing animals for slaughter | Topic 3.1 Delivery of slaughter animals to meat processing plants. | Lectures, Lab work |

| | | |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------|
| | Topic 3.2 Acceptance and maintenance of livestock, poultry and rabbits at meat industry enterprises. | Lectures, Lab work |
| Module 4. Slaughter of animals | Topic 4.1. Stunning, exsanguination and collection of food blood, skinning, processing of pork carcasses in the skin. | Lectures, Lab work |
| | Topic 4.2. Removing internal organs, sawing carcasses, veterinary and sanitary control. | Lectures, Lab work |
| | Topic 4.3. Processing of poultry and rabbits. | Lectures, Lab work |
| Module 5. Commodity valuation and branding of carcasses | Topic 5.1 Categories of fatness of meat of cattle, small cattle, pigs, horses, etc. | Lectures, Lab work |
| Module 6. By-product processing technology | Topic 6.1 Technology for processing offal: wool, meat and bone, pulp, mucous. | Lectures, Lab work |
| Module 7. Canning meat | Topic 7.1 Principles and methods of preserving meat. | Lectures, Lab work |
| | Topic 7.2 Preserving meat with low and high temperatures, chemical means. | Lectures, Lab work |
| | Topic 7.3 Smoking meat products. | Lectures, Lab work |
| Module 8. Morphological composition of carcasses | Topic 8.1 The essence and indicators of product quality. | Lectures, Lab work |
| | Topic 8.2 Product properties. | Lectures, Lab work |
| | Topic 8.3 Methods for determining the quality of products. | Lectures, Lab work |
| Module 9. Standardization of animal slaughter products | Topic 9.1 The essence of standardization. GOSTs. | Lectures, Lab work |
| | Topic 9.2 Standardization of meat and meat products. | Lectures, Lab work |
| | Topic 9.3 Standardization of milk and dairy products. | Lectures, Lab work |
| | Topic 9.4 Standardization of eggs. | Lectures, Lab work |
| | Topic 9.5 Standardization of honey. | Lectures, Lab work |

6. COURSE EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Material and technical support of the course

| <i>Classroom for Academic Activity Type</i> | <i>Equipping the classroom</i> | Specialized educational/laboratory equipment, software and materials for the development of the course (if necessary) |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Lecture | An auditorium for conducting lecture-type classes, equipped with a set of specialized furniture; a board (screen) and technical means of multimedia presentations. | - |
| Laboratory | An auditorium for laboratory work, individual consultations, routine monitoring and interim certification, equipped with a set of specialized furniture and equipment. | - |
| 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. RESOURCES RECOMMENDED FOR COURSE STUDIES

Main readings:

1. Lyubimov A.I. Workshop on the production of livestock products. - 1st ed. - St. Petersburg: Lan', 2014. - 192 c.
2. Kiselev L.Yu. Fundamentals of production technology and primary processing of livestock products. - 1st ed. - St. Petersburg: Lan', 2013. - 448 c.
3. Iskhakov R.S. Scientific and practical substantiation of intensification of beef production with the rational use of genetic potential of cattle : a monograph / R.S. Iskhakov, Kh. - SPb. : Lan Publishing House, 2018. - 284 c. - (Textbooks for universities. Special literature). - ISBN 978-5-8114-2826-7. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=464880&idb=0

Additional Readings:

1. Mishanin Y.F. Biotechnology rational processing of animal raw materials [Electronic resource] : Tutorial / Y.F. Mishanin. - SPb. Lan' Publisher, 2017. - 720 c. - (Textbooks for universities. Special literature). - ISBN 978-5-8114-2562-4. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=464925&idb=0
2. Kobtsev M.F., Ragimov G.I., Ivanova O.A. Practicum on cattle breeding and technology of production of milk and beef. - 1st ed. - St. Petersburg: Lan',

2016. - 192 c.

3. Standardization, technology of processing and storage of livestock products [Electronic resource] : Tutorial / G.S. Sharafutdinov [et al.] - 3rd ed., stern. - SPb. : Lan Publishing House, 2016. - 624 c. - (Textbooks for universities. Special literature). - ISBN 978-5-8114-1306-5. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=465081&idb=0
4. Pronin V.V. Technology of primary processing of livestock products [Electronic resource] : Tutorial / V.V. Pronin, S.P. Fisenko, I.A. Mazilkin. - SPb. : Lan' Publisher, 2013. - 176 c. - (Textbooks for Universities. Special literature). - ISBN 978-5-8114-1452-9.

Internet sources

1. Electronic libraries (EL) of RUDN University and other institutions, to which university students have access on the basis of concluded agreements:

- RUDN Electronic Library System (RUDN ELS) <http://lib.rudn.ru/MegaPro/Web>
- EL "University Library Online" <http://www.biblioclub.ru>
- EL "Yurayt" <http://www.biblio-online.ru>
- EL "Student Consultant" www.studentlibrary.ru
- EL "Lan" <http://e.lanbook.com/>
- EL "Trinity Bridge"

2. Databases and search engines:

- electronic foundation of legal and normative-technical documentation <http://docs.cntd.ru/>
- Yandex search engine [https:// www .yandex.ru/](https://www.yandex.ru/)
- Google search engine <https://www.google.ru/>
- Scopus abstract database <http://www.elsevierscience.ru/products/scopus/>

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

1. A course of lectures on the course "**Processing technology for livestock products**".
2. Laboratory workshop on the course "**Processing technology for livestock products**".

* - The training toolkit and guidelines for the internship are placed on the internship page in the university telecommunication training and information system under the set procedure.

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL AS COURSE RESULTS

The assessment toolkit and the grading system* to evaluate the level of competences (competences in part) formation as the course results are specified in the Appendix to the course syllabus.

* The assessment toolkit and the grading system are formed on the basis of the requirements of the relevant local normative act of RUDN University (regulations / order).

DEVELOPER:

Associate Professor of the Department of Veterinary
Medicine

Position, Basic curriculum

Signature

Nikitchenko V.E.

Full name.

HEAD OF EDUCATIONAL DEPARTMENT:

Department of Veterinary Medicine

Name Basic Curriculum

Signature

Vatnikov Yu.A.

Full name.

**HEAD OF
HIGHER EDUCATION PROGRAMME:**

Director of the Department of Veterinary Medicine

Position, Basic curriculum

Signature

Vatnikov Yu.A.

Full name