

Annotation of the optional educational component

Course title	Materials science
Lecturer	Nataliia Fedoruk Candidate of Agricultural Sciences Associate Professor of the Department of Food Technology and Technology of Processing of Livestock Products
Course and semester in which the discipline is planned to be studied	2 course, 2 semester
Faculties whose students are invited to study the discipline	Faculty of Biotechnological
List of competencies and relevant learning outcomes provided by the discipline	<p>According to the requirements of the educational-professional program "Food Technologies", applicants must acquire the ability to obtain the following competencies:</p> <ul style="list-style-type: none"> GC 3. Ability to use knowledge in practical situations; GC 6. Work in a team and have interpersonal skills; GC 7. Ability to evaluate and ensure the quality of work performed; GC 8. Commitment to the preservation of the environment; PC 1. The ability to use professional knowledge in the field of production and processing of livestock products for effective business. <p>The result of studying the discipline is the students' acquisition of such knowledge and skills:</p> <ul style="list-style-type: none"> - Know modern and new components of technological processes for the production and processing of livestock products. - Understand the functional responsibilities, leveling the influence of various factors and production situations. - Be able to organize the joint activities of the work team. - To know the implementation of the primary accounting of material values, fixed assets, labor and its payment. - Carry out primary accounting of material assets, fixed assets, labor and its payment. - Be able to understand the main historical stages in the development of the subject area.
Description of the discipline	
Prerequisites required for the study of the discipline	The elective course "Materials Science" is based on knowledge of such disciplines as "Technological equipment of processing enterprises", "Fundamentals of refrigeration technologies", "Black geometry and technical mechanics", "Standardization of livestock products", studied in previous courses.

<p>The maximum number of students who can study at the same time</p>	<p>50 students</p>
<p>Topics of classroom classes</p>	<p><i>Content module 1. Construction materials. General information about metals</i> Topic 1.1. Metal and construction materials. Topic 1.2 Properties of metallic materials. Topic 1.3. Non-ferrous metals and alloys. Topic 1.4. Alloys of metallic materials. <i>Content module 2. Non-metallic materials. Packaging materials.</i> Topic 2.1. Non-metallic construction materials. Topic 2.2. Polymer and rubber materials. Topic 2.3. Inorganic glass. Wood and composite materials. Topic 2.4. Packaging, its functions. Packaging materials</p>
<p>Language of instruction</p>	<p>Ukrainian</p>