

**Annotation of elective educational component  
«Safety, ecological mycology and toxicology of forage»**

<b>Academic discipline</b>	<b>Safety, ecological mycology and toxicology of forage</b>
<b>Tutor</b>	Slomchynskiy Mykhailo Mykolaiovych PhD agricultural sciences, associate professor, department of technology of feed, feed additives and feeding of animals
<b>Courses and semesters, when the discipline is planning to study</b>	1 course (master degree), 2 semester
<b>Faculties whose students are invited to study discipline</b>	Biological-technological faculty
<b>List of competencies and learning-related outcomes that discipline provides</b>	<p>According to the requirements of the educational-professional program "Technology of production and processing of livestock products" applicants should acquire the ability to obtain the following competencies:</p> <p>GC 1 (general competence). Ability to abstract thinking, analysis and synthesis.</p> <p>GC 2. Skills in using information and communication technologies.</p> <p>PC 1 (professional competence). Ability to analyze and control the safety and quality of feed and feed products and animal nutrition.</p> <p>PC 10. The ability to clearly and unambiguously convey one's own knowledge, conclusions and arguments to specialists and non-specialists, in particular to people who are studying.</p> <p>The result of studying the discipline is the acquisition by students of the following knowledge and skills:</p> <ul style="list-style-type: none"> <li>- to evaluate and ensure the quality and safety of production technologies of animal husbandry products, fodder and fodder products, animal nutrition levels and products of animal origin (to control the quality of fodder and fodder products; to apply biological, physiological and biochemical characteristics of animals to ensure the use of safe fodder and livestock products);</li> <li>- to develop, implement and modernize effective technologies and processes in the field of production and processing of animal husbandry products (to implement measures to increase the level of productivity of animals, improve the state of health and quality of their products; to coordinate measures to improve the quality and safety of</li> </ul>

	<p>animal husbandry products);</p> <ul style="list-style-type: none"> <li>- to search for necessary data in scientific literature, databases and other sources, analyze and evaluate these data;</li> <li>- to communicate freely orally and in writing in Ukrainian and one of the foreign languages when discussing professional issues, research and innovations in the field of production and processing of livestock products and related problems;</li> <li>- to be responsible for the development of professional knowledge and practices, evaluation of the team's strategic development, formation of an effective personnel policy.</li> </ul>
<b>Description of the discipline</b>	
<b>Prerequisites needed for studying the discipline</b>	The selective educational discipline "Safety, ecological mycology and toxicology of forage" is based on the knowledge of such disciplines as "Animal feeding", "Technology of livestock production processing", "Production, storage and quality control of feed and feed additives", "Higher mathematics", "Information systems and technologies", "Hygiene and welfare of animals", "Technological control of production of livestock products", "Microbiology in animal husbandry".
<b>Students' limit in a group</b>	20 students
<b>Topics of in-class activity</b>	<p><b>Lectures</b></p> <ol style="list-style-type: none"> <li>1. Introduction. The main provisions of the law on feed safety and quality.</li> <li>2. Powers of executive authorities in the field of production, circulation and feed safety.</li> <li>3. Rights and obligations of market operators.</li> <li>4. State regulation in the field of feed safety.</li> <li>5. Peculiarities of the functioning of the feed market in Ukraine.</li> <li>6. Characteristics of microscopic fungi and virulence factors.</li> <li>7. Hygiene of fodder due to the impression of their microscopic fungi.</li> <li>8. Biosynthesis of mycotoxins.</li> <li>9. Sanitary and ecological assessment of feed quality.</li> <li>10. Ways to improve the quality of fodder.</li> <li>11. Methods of disinfection and improvement of feed quality.</li> <li>12. Characteristics of certain groups of toxigenic fungi and their toxins.</li> </ol>

	<p><b>Practical classes</b></p> <ol style="list-style-type: none"> <li>1. Familiarization with the method of using the main provisions of the law on feed safety and quality.</li> <li>2. Development of models of the functioning of the enterprise for the production and sale of fodder.</li> <li>3. Development of models for optimizing the composition of compound feed recipes with the inclusion of conditionally hazardous feed for various animal species and solving them using PC programs.</li> <li>4. Development of models for optimizing the composition of compound feed recipes with the inclusion of conditionally hazardous feed for various types of poultry and solving them using PC programs.</li> <li>5. Development of models for optimizing the composition of compound feed recipes with the inclusion of conditionally dangerous feeds for various types of fish and solving them using PC programs.</li> <li>6. Characteristics of <i>Aspergillus</i>.</li> <li>7. Characteristics of <i>Penicillous</i>.</li> <li>8. Characteristics of <i>Mukor</i> .</li> <li>9. Characteristics of horned fungi.</li> <li>10. Characteristics of soot fungi</li> <li>11. Characteristics of <i>Claviceps</i>.</li> <li>12. Action of mycotoxins on the animal organism.</li> </ol>
<b>Language of teaching</b>	Ukrainian