

Abstract of the compulsory educational component

Academic discipline	Information systems and technologies.
Tutor	Mykhailo Ivanovych Trofymchuk , PhD . Econ . Sciences, associate professor Department of information systems and technologies
Courses and semesters, when the discipline is planning to study	1 course; 2 semester
Faculties whose students are invited to study discipline	Biological-technological faculty
List of competencies and learning-related outcomes that discipline provides	<p>According to the requirements of the educational and professional program "Technology of production and processing of livestock products", applicants must acquire the ability to obtain the following competences:</p> <p>ZK 3 (general competence). Ability to apply knowledge in practical situations.</p> <p>ZK 7. Ability to evaluate and ensure the quality of performed works.</p> <p>ZK 9. Ability to search, process and analyze information from various sources.</p> <p>FC 1. The ability to use professional knowledge in the field of production and processing of livestock products for effective business management.</p> <p>The result of studying in the discipline is the acquisition by students of the following knowledge and skills:</p> <p>7.1. Be able to use MS software Office for processing research results.</p> <p>7.2. To be able to perform computer calculations related to the technological processes of processing livestock products using MS Excel .</p> <p>7.2. To understand the conceptual-technological and organizational-methodical foundations of the development of information systems.</p> <p>16.1. Be able to save data obtained during research in databases, and conduct database analysis.</p> <p>16.2. Be able to evaluate and analyze indicators</p> <p>17.1 Demonstrate the skills of searching, collecting, processing and analyzing information, calculating indicators to justify decisions using information technologies.</p> <p>17.2. Know the problems in information protection and ways to solve them.</p>
Description of the discipline	
Preconditions necessary for the study of discipline	compulsory educational component "Information systems and technologies" is based on the knowledge of such disciplines as "Informatics", "Foreign language", "Mathematics", which were studied in secondary school.
Maximum number of students who can study simultaneously	55 students
Lesson plans	<p>Lectures</p> <ol style="list-style-type: none"> 1. Constituents parts computer and their interaction. Information. Units of information. Operating Systems. Work in the MS Windows environment. Working with discs. Computer networks. Internet. Architecture local networks 2. Text editor MS Word. Creating presentations. Power Point . 3. Electronic MS Excel tables . Functions. Lists. Diagrams. 4. Programming in MS Office. Basics of VBA Basics of VBA programming. 5. Programming algorithms branched structures . Programming algorithms of cyclic structure 6. Language Rand its use for data processing. 7. Bases data 8. Using the ACCESS DBMS

	<p>Practical classes</p> <ol style="list-style-type: none"> 1. Components of a computer and their interaction. Information. Units of information. Architecture of a personal computer. Peripheral devices. Files and directories. MS Windows operating system. OS loading. 2. Work in the MS Windows environment. Working with discs. Adjusting parameters. Computer networks. Architecture of local networks. Internet. Information search. 3. MS WORD. General information about the text editor. Creating and saving documents. Font, paragraph formatting. Using styles. Creating new styles. Work in the form of an electronic document. Generating document content. Printing of documents. 4. MS WORD. Inserting objects. Footers. Footnotes. Drawings, tables, diagrams, schemes, formulas. 5. MS PowerPoint . Create and save presentations. Animations of slide objects. Slide transition. Adjusting parameters. 6. MS Excel spreadsheets. General Information. Menu bar, toolbars. Work book. Creating and saving tables. Formatting cells in Excel. Protection of cells, letters and books. Arithmetic expressions, formulas. 7. Work in MS Excel. Working with functions. Links to cells. Using functions. 8. Work in MS Excel. Logical functions. Choosing the type and type of diagram. Making a diagram. Construction of graphs. Table partitioning and pinning areas. 9. Work in MS Excel. Print the document. Working with lists. Sorting, filters. Results 10. MS Office macros. Use of macros for special research in professional activities, data processing. Creating macros in the Visual Editor Basic . Variables. Types of variables. Arithmetic operators. Comparison operators. Basic elements of VBA. Hierarchy of objects. Methods, properties, events. Arithmetic operations, input and output of information 11. Conditional operators. A simple form of the IF operator . The multi-block form of the IF operator 12. FOR loop . Using loop operators to process data arrays. 13. Language R and its use for data processing. 14. Language R. _ Functions . 15. Databases. General principles of database design. 16. SUDB MS Access. Tables. 17. SUDB MS Access. Requests Using MS Access technologies to prepare and present analytical reports.
Teaching language	Ukrainian, English