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<tr><td>Name of the discipline</td><td colspan="4">Environmental and food quality</td></tr>
<tr><td>Type</td><td colspan="2">Optional</td><td>Credits</td><td>2</td></tr>
<tr><td>Year of study</td><td colspan="2">III</td><td>semester</td><td>VI</td></tr>
<tr><td rowspan="2">Number of hours</td><td>course</td><td>15</td><td>Practical/laboratory work</td><td></td></tr>
<tr><td>SEMINARS</td><td>30</td><td>Individual work</td><td>15</td></tr>
<tr><td>compound</td><td colspan="4">Specialized</td></tr>
<tr><td>Course holder</td><td colspan="4">Tamara Cotelea</td></tr>
<tr><td>location</td><td colspan="4">Chisinau city, Malina Mică str., 66, didactc block No. 2</td></tr>
<tr><td rowspan="2">Prerequisites and requirements of:</td><td colspan="4">Program: basic knowledge in related disciplines such as knowledge in environmental hygiene, toxicological chemistry, pharmaceutical chemistry, biology, biochemistry, biophysics, physiopathology, anatomy, bioorganic chemistry .</td></tr>
<tr><td colspan="4">Skills: knowledge of the language of instruction, confirmed skills in sciences at the university level, digital skills (using the internet, processing documents, spreadsheets and presentations, using graphics programs), communication and teamwork skills, qualities - tolerance, compassion, autonomy.</td></tr>
<tr><td>The mission of the discipline</td><td colspan="4">The study of environmental factors is imposed by the need to contribute to improving their quality in the conditions in which the continuous degradation of the environment, occurring as a result of the development of human civilization, has a negative impact on the quality of food resources and implicitly on human health.</td></tr>
<tr><td>The topic presented</td><td colspan="4">Introduction to Environmental and food quality. Object and problems. The peculiarities of sanitary chemistry as an optional pharmaceutical discipline. Main directions of application.
Laws of penetration, distribution of chemical toxins in the body. Pharmacokinetic and pharmacodynamic processes. Water - an environmental element. Atmospheric air - an environmental element. Chemical composition of air. Influence of atmospheric air on the human body. Air basin pollution. Classification of atmospheric air pollutants. Physical, chemical, biological, microbiological, sound pollution of atmospheric air. Pollutants with allergenic action. Factors that condition the effect of polluting substances on the human body. Soil structure. Physical properties of soil. Chemical composition of soil. Soil pollution. Indicators of chemical pollution of soil. Direct and indirect indicators. Food and nutrition – general. Inadequate intake of nutritional principles. Balanced diet - general principles. The nutritional needs of the body. Maturation of food products . Biochemical processes that occur in vegetables and fruits after harvest. The influence of the culinary process on nutritional products. Microbial spoilage of food. Water activity. Microbial spoilage of proteins, carbohydrates, fats. Caramelization of sugar. Evaluation and prevention of enzymatic and non-enzymatic browning. Prevention of enzymatic browning in the culinary process. Food preservation. Preservation methods: low and high temperature preservation, lyophilization, chemical methods, salting, smoking. Food preservation. Preservation methods: low and high temperature preservation, lyophilization, chemical methods, salting, smoking.</td></tr>
<tr><td>Study purposes</td><td colspan="4">• to know the basics of the legislation for conducting chemical-sanitary analysis of the environment and implicitly of food in the Republic of Moldova; to interpret the principles of ensuring the</td></tr>
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	quality of environmental factors in correlation with the health status of the population; • to define toxic substances of organic and inorganic origin; to solve the problems of chemical-sanitary analysis in arguing the issue of food quality and safety; • to integrate into contemporary analysis methods and the possibilities of their application in conducting chemical-sanitary research for environmental protection; • to provide the general laws of distribution and transformation of toxic compounds in the human body, the occurrence of toxic effects, the toxic situation; • to apply the evidence for their preliminary preparation and research; • to know the documentation of chemical-sanitary research; • to define contemporary analysis methods and the possibilities of their application in conducting chemical-sanitary research for environmental protection; • to know the general laws of distribution and transformation of toxic compounds in the human body, the occurrence of toxic effects, toxic situations.
Purchased practical skills	• promoting logical reasoning of practical applicability. Promoting logical reasoning of evaluation and self-evaluation in decision-making of chemical-sanitary analysis. Respecting the norms of chemical-sanitary ethics and deontology when dispensing medicinal remedies to the population and medical institutions; • Identifying professional training needs based on the evolution of the pharmaceutical system. Determining priorities in the pharmacist's continuing professional training, also taking into account the sanitary chemistry curriculum. Assessing the changes that have occurred in the medical and sanitary system .
Evaluation form	**Exam**