



Academic Year: **2022/2023**

Field of study: **Food Safety and Quality Management**

Descriptions of Offered courses

Food raw materials of plant origin

The subject involves issues related to the directions and technology of processing cereal, root, fruit and vegetable raw materials; with the quality requirements for raw materials and their processed products, methods of assessing these characteristics, and the importance of processing processes in shaping the quality of finished products, as well as with the principles of safe food production and the use of environmentally friendly technologies.

Food raw materials of animal origin

The subject involves issues related to the type and classification of raw materials of animal origin, including beef, pork and poultry meat as well as cow's milk and eggs; quality requirements for raw materials and their processing products, methods of assessing these characteristics.

Safety in the processing of plant raw materials

The subject involves issues related to the methods and devices used in the production of food of plant origin as well as the analysis of the quality and safety of the production of products of plant origin.

Safety in the processing of animal raw materials

The subject involves issues in the field of methods and devices used in the production of food of animal origin, including the production and processing of beef, pork and poultry meat and cow's milk. It also includes an analysis of the quality and safety of the production of animal products.

Food biochemistry

The subject involves the basics of biochemistry. The purpose of the course is transferring the knowledge about chemical compounds and chemical reactions occurring in living organisms.

Analysis and evaluation of food quality

The subject involves issues in the field of advanced analytical methods: spectrophotometry, chromatography, optical and sensory techniques for quality control and testing the composition of raw materials and food products.

Food toxicology

The issues raised within the subject are to indicate the procedure aimed at preventing the introduction of undesirable, risk and unsafe ingredients into the food product.

Quality control systems

The issues raised within the subject are to consolidate knowledge in the field of quality assurance and food safety under quality control systems.



Normalization, standardization and certification of food

The subject involves issues in the field of quality, standardization, methods and systems of quality and food safety management at all stages of the food chain. Tasks: learning the ISO 22 000 standard in the field of safe product implementation; understanding the perception of consumers in terms of risk related to food.

Allergens in food

The subject involves issues related to the influence of food substances on the human organism, types of allergenic foods and active substances causing allergic reactions. As part of the course, the student will learn analytical methods for the detection of allergens in food.

Food microbiology

The subject involves issues related to the morphology, physiological properties of the main groups of microorganisms (bacteria, fungi, viruses), aspects related to the growth kinetics of microorganisms, nutrition and metabolism, as well as the presence of microorganisms in the natural environment and their impact on this environment. The thematic scope is also devoted to the characteristics of microorganisms occurring in selected groups of foodstuffs and a review of the most important groups of microorganisms potentially contaminating food products and their impact on food spoilage processes.

Basics of food production techniques

The subject involves issues related to the basic methods of food processing and preservation, mechanisms of changes of basic food ingredients occurring during technological processes, characteristics of unit operations and technological processes.

Food chemistry

The subject involves the issues of the chemical composition of food and the characteristics of food raw materials, including physico-chemical properties, chemical structure, and nutritional properties of individual food ingredients and food additives.

Processing of animal raw materials

The subject involves issues in the field of obtaining and processing beef, pork and poultry meat and cow's milk, quality requirements for raw materials and their processing products, methods of assessing these features, the importance of processing processes in shaping the quality of finished products, and the characteristics of products made of meat and milk.

Processing of plant raw materials

The subject involves issues in the field of directions and technologies of processing cereal, root, fruit and vegetable raw materials, quality requirements for raw materials and their processing products, methods of assessing these features, and the importance of processing processes in shaping the quality of finished products, as well as the basic principles of safe food production and use of environmentally friendly technologies.

Food commodity science

Presentation of the multidisciplinary nature of commodity science, its location in the system of science, examples of scientific experiments conducted in commodity science research.



Food law

The subject involves issues related to the basic principles of the food law system, basic concepts in the field of health protection, the principles of organization and functioning of the health care system in Poland, the Public Health Act in the context of food law, selected legal regulations regarding food safety and nutrition, functioning of organs official food control, with particular emphasis on the State Sanitary Inspection and the food labeling system.

Food biotechnology

The subject involves issues related to the conditions for the optimal implementation of biotechnological processes and operations as well as unit operations determining the quality of products, including the improvement of organoleptic properties of products (color, taste, smell) and their nutritional value (protein, lipid, saccharide content).