



**Field of study: Dietetics**  
**Offered courses for the academic year 2021/2022 with  
descriptions:**

1. Human Nutrition part 1

The aim of the course is to familiarize students with the basic issues of nutrition science.

Topics:

- historical overview of the evolution of nutrition;
- information contained in the food composition tables;
- metabolic processes, energy balance of the system and energy sources;
- proteins, carbohydrates, fats – division, role in nutrition, digestion and absorption, nutritional value, sources and standards;
- minerals and vitamins – functions in the body, food sources;
- acid-base balance.

2. Medical Biology

The aim of the course is to familiarize students with the structure and function of the cell as the basic unit of life and presenting the processes that determine its growth, survival and reproduction. Topics:

- the cell as the basic structural and functional unit of the organism;
- cell cycle and mitosis;
- meiosis and gametogenesis;
- structure and function of nucleic acids;
- types of inheritance;
- genetic variability.

3. Information Technology

The aim of the course is to familiarize students with the software for creating, presenting, uploading and information security. Topics:

- basic terms of information technology and building a personal computer;
- using the computer and managing files, operating system characteristics;
- searching information on the Internet;
- PowerPoint presentations;
- basic concepts of computer graphics;
- data archiving in WinRAR.



#### 4. Nutrition in Health and Disease part 1

The aim of the course is to familiarize students with the principles of diet therapy in selected disease entities. Topics:

- classification and characteristics of hospital diets;
- nutrition for gastroesophageal reflux disease;
- nutrition in acute and chronic gastritis;
- nutrition in gastric and duodenal ulcer disease;
- nutrition in ulcerative colitis;
- nutrition in Leśniowski and Crohn's disease and irritable bowel disease;
- nutrition in chronic liver diseases, liver failure and after liver transplantation.

#### 5. Pediatric Nutrition

The aim of the course is to familiarize students with the basic knowledge of pediatrics, as well as nutrition of children, pregnant women and women during lactation. Students learn about the stages of proper ontogenetic development and acquire the ability to assess the proper nutritional status. After the course students are able to name clinical symptoms and describe the course of diet-related diseases, are able to establish the correct nutritional management in functional disorders of gastrointestinal tract. Students are also able to plan appropriate nutrition for pregnant and lactating women as well as for naturally and artificially fed infants.

#### 6. Analysis and Assessment of Food Quality

The aim of the course is to familiarize students with the basic concepts of food and nutrition, methods of basic nutrient analysis and the assessment of food quality. Topics:

- collection and initial preparation of test samples;
- methods used in food evaluation;
- determination of the content of basic food ingredients (proteins, saccharides, fats, minerals and vitamins);
- food contamination.



7. Food and Meal Technology and Commodity Science part 1 and part 2

The aim of the course is to familiarize students with qualitative and culinary evaluation of raw materials, semi-finished products and ready meals; presentation of issues related to the preliminary and heat treatment of raw materials and changes taking place during these processes. The aim is also to familiarize the students with the processes used in gastronomic technology of various groups of raw materials. During the course students perform the organoleptic analysis of food and determine the impact of the quality of the raw material on the quality of the dish.

8. Hygiene, Toxicology and Food Safety

The aim of the course is to familiarize students with the requirements for hygiene and safety of food production. Topics:

- food safety management systems in food industry plants (GHP, GMP, HACCP, ISO 22000);
- classification of poisons and factors influencing the toxicity of substances;
- methods of determination of toxic substances in food;
- food poisoning epidemiology;
- responsibilities of employees and employers in the field of production hygiene;
- technical, hygienic and sanitary requirements for food industry plants.

9. Human Nutrition part 2

The aim of the course is to familiarize students with the basic issues of nutrition science. Topics:

- the nutritional value of food products;
- functional food and food for special nutritional purposes;
- healthy eating pyramid;
- nutrition standards;
- principles of menu planning;
- assessment of diet and nutritional status;
- principles of proper nutrition of healthy people depending on age and physiological state.



## 10. Food Chemistry

The course covers issues in the field of food chemistry. During the course, topics related to information on the chemical composition of food and the characteristics of food raw materials, including physicochemical properties, chemical structure and nutritional properties of individual food ingredients and food additives, are discussed. Students have the opportunity to learn about the characteristics of the basic food ingredients. Students also gain the ability to assess the risk of food safety and learn the principles of operation of chemical laboratories.

## 11. Basis of Mass Caterers Organisation

The aim of the course is to familiarize students with the basic issues of mass nutrition. Topics:

- general characteristics of the catering activity based on the Polish Classification;
- departments in mass catering establishments;
- cold food kitchen and hot food kitchen;
- equipment and arrangement of technological equipment in the kitchen;
- ways of post-consumer waste disposal;
- food distribution system in hospitals;
- consumer service systems;
- nutrition in hospitals as a part of treatment.

## 12. General Microbiology and Food Microbiology

The aim of the course is to provide students with knowledge of the morphology, anatomy and physiological properties of selected groups of microorganisms. The aim is also to present knowledge about the kinetics of microbial growth, ways of nourishing microorganisms and issues related to their metabolism. During the course, the microflora of selected groups of food products, water and air will be characterized. The groups of microorganisms responsible for food spoilage will be discussed. The basics of food preservation and issues related to probiotic microorganisms will also be discussed.

## 13. Nutrition and Dietetics Workshop

The aim of the course is to familiarize students with:

- home measures;
- the nutritional value of juices, drinks, nectars and puree juices;
- the rules of the cocktail diets;



- the use of poultry meats, slaughter and exotic animals, eggs, marine and freshwater fish in dietetics;
- the role of omega-3 fatty acids in the diet;
- the use of bee products and food convenient in dietetics;
- alternative sweeteners;
- the nutritional value of fast food dishes;
- the use of legumes as an alternative to meat dishes;
- properties of green tea, coffee, cocoa and alcoholic beverages in dietetics;
- the principles of an easily digestible, high-residual and high-protein diet.