



SZKOŁA GŁÓWNA
GOSPODARSTWA
WIEJSKIEGO

Functional food

Educational subject description sheet

Basic information

Field of study Food Science - Technology and Nutrition	Didactic cycle 2023/24	
Speciality -	Subject code NoZTNS_D.110.04514.23	
Organizational unit Faculty of Food Technology	Lecture languages english	
Study level first cycle (bachelor's degree)	Mandatory Elective subjects	
Study form full-time studies	Block Major subjects	
Education profile General academic	Disciplines Food technology and nutrition	
Coordinator	Katarzyna Świąder	
Teacher	Katarzyna Świąder, Małgorzata Ziarno	
Period Semester 5	Examination Pass with grade	Number of ECTS points 3
	Activities and hours Lecture: 30 Auditorium exercises: 15	

Goals

Code	Goal
C1	Provide knowledge and skills to identify and know the classification rules of functional food, the principles of correct labelling of functional food and its marketing in accordance with current legal regulations. Characteristics and applications of selected food groups and food components included in functional food.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge - Student knows and understands:			
W1	the concepts of functional food and the rules for its labelling and marketing and know examples of foods and food additives with a specific health promoting function	TN_K1_W03, TN_K1_W08	Project
Skills - Student can:			
U1	acquire, analyse and interpret information from a variety of sources necessary for an understanding of how food ingredients or foods may perform a health promoting function and thus be used in the production of functional foods, working either alone or in a team	TN_K1_U07, TN_K1_U08	Project
Social competences - Student is ready to:			
K1	exchange knowledge and work in a team/interdisciplinary way in preparing and carrying out project work	TN_K1_K01	Project

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Participants of the course will become familiar with the following issues: Classification of functional foods; Status of functional foods in the European Union and worldwide; Nutrition and health claims; Discussion of selected foods and food additives with a special health-promoting function; Characteristics of probiotics and prebiotics and their use in food production; Legal aspects of probiotics and prebiotics in the European Union and worldwide; Definition of novel foods and characteristics of types of novel foods; Fortified foods; Alternative sources of protein; Sources of ingredients with adaptogenic and immunomodulating effects.	W1, U1, K1	Lecture, Auditorium exercises

Course advanced

Activities	Methods of conducting classes
Lecture	Lecture
Auditorium exercises	Case study, Discussion, Brainstorm, Problem solving, Teamwork

Activities	Examination method	Percentage
Lecture	Project	50%
Auditorium exercises	Project	50%

Activities	Credit conditions
Lecture	Project. The pass mark is a positive mark. A credit - a total mark resulting from students' presentations (literature review, results of the work and their interpretation, summary), active participation in classes and timely completion of previously established tasks. A record of the assessment achieved by the student as part of the project milestone reports and the final report and its presentation.
Auditorium exercises	Project. The pass mark is a positive mark. A credit - a total mark resulting from students' presentations (literature review, results of the work and their interpretation, summary), active participation in classes and timely completion of previously established tasks. A record of the assessment achieved by the student as part of the project milestone reports and the final report and its presentation.

Literature

Obligatory

1. Świdorski F. (red.) (2003): Comfort food and functional food. WNT, Warsaw.
2. Shi J., Mazza G. (2002): Functional Foods, CRC PRES, London
3. Innovation in Healthy and Functional Foods, 1st Edition, Dilip Ghosh, Shantanu Das, Debasis Bagchi, R.B. Smarta, 2012, CRC Press
4. Probiotics and Prebiotics in Foods Challenges, Innovations, and Advances, Adriano Gomes da Cruz, C. Senaka Ranadheera, Filomena Nazzaro, Amir Mortazavian, 2021 Elsevier Inc.

Optional

1. Latest available scientific journals
2. Relevant scientific publications, including those of the course instructors

Calculation of ECTS points

Activity form	Activity hours*
Lecture	30
Auditorium exercises	15
Preparing a report	30
Preparation of a multimedia presentation	10
Student workload	Hours 85
Number of ECTS points	ECTS 3

* hour means 45 minutes

Effects

Code	Content
TN_K1_K01	The graduate is ready to contact and exchange of experiences and knowledge with the experts in order to explore better solutions for particular problems connected to among others: food production, delivery chain, food storage and human nutrition
TN_K1_U07	The graduate can communicate with the surrounding using specialist terminology appropriate for the field of study, including taking part in a discussion on professional issues, also using a foreign language in the field relevant to the field of study, in accordance with the requirements set out for B2 level of the European System for the Description of Education Linguistic
TN_K1_U08	The graduate can plan, organize and carry out, independently or in a team, simple project tasks related to food production and evaluation, human nutrition, and consumer behaviour
TN_K1_W03	The graduate knows and understands the composition and properties of raw materials, auxiliaries, food additives, and food industry products, the possibilities and conditions of use of them in food production, taking into account the principles of sustainable development and their impact on human health
TN_K1_W08	The graduate knows and understands rules and organization methods of the production and chain of food supply (planning, production organization, storage, distribution of food and food consumption in collective and individual nutrition) in accordance with the legal requirements of assurance of quality and food safety and the principles of sustainable development