SZKOŁA GŁÓWNA GOSPODARSTWA WIEJSKIEGO

Introduction to human nutrition

Educational subject description sheet

Basic information

Field of study
Course Offer for exchange students - first degree studies (BA programmes)

Speciality
-

Organizational unit
Course Offer for exchange students

Study level
first degree studies (BA programmes)

Study form
full-time studies

Education profile
General academic

Didactic cycle
2024/25

Subject code
PWMPWM1S_D.A200000.02438.24

Lecture languages
english

Mandatory
Obligatory subjects

Block
Major subjects

Disciplines
Food technology and nutrition

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Teacher	Joanna Kałuża, Dawid Madej, Ewa Sicińska, Agata Białecka-Dębek, Maria Szmidt

Period	**Examination**	**Number of ECTS points**
Summer semester	Pass with grade **Activities and hours** Lecture: 20 Laboratory exercises: 30	4

Goals

Code	Goal
C1	Providing basic knowledge, skills and competency about role of macro- and micronutrients in the body, their use from diet; recommendations, symptoms of deficiency; main sources of nutrients in food rations. The subject is an introduction to the following subjects: Advance in Human Nutrition and Nutrition of Selected Population Groups.

Entry requirements

Lack

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge – Student knows and understands:			
W1	the role of nutrients in the body, including the body's needs		Written credit
W2	energy content and nutritional values of foods, the main sources of nutrients in the diet, and their effect on health		Written credit
Skills – Student can:			
U1	identify (on a basic level) nutritional problems - deficiencies and excessive intake of some nutrients in the diet and in the organism, and can assess the composition, energy and nutritional value of food products and diet in relation to nutritional recommendations		Written credit
U2	plan and perform simple task in the field of human nutrition individually and in a team		Written credit
Social competences – Student is ready to:			
K1	recognize the importance of knowledge related to human nutrition and health		Written credit

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Basic characteristic of the course, basic concepts and definitions. The importance of nutrition for health. The composition of the human body. Human metabolism and energy, methods of its measurement; energy expenditure and balance. Macronutrients: proteins, fats and carbohydrates, their division, functions in the body, digestibility and nutritional value; nutrition recommendations; major dietary sources. Vitamins and minerals: classification, role, symptoms of deficiencies and excesses, nutrition recommendations; major dietary sources. Water management in the body, electrolytes in human nutrition. Nutritional recommendations in different world regions.	W1, W2	Lecture

No.	Course content	Subject's learning outcomes	Activities
2.	Food tables as a source of information about the nutritional value of food. Characteristics of nutritional recommendations in different world regions and their use. Energy values of food products and energy expenditure. Characteristics of content of fat, fatty acids (including EFAs) and cholesterol in foods and diet. Food products as a source of dietary fibre in a diet. Water intake with different sources - its comparison to nutritional recommendations and individual needs. Determination of fluoride content in diet and water (laboratory class). Vitamin D content in meals for chosen group of people and the prevention of its deficiency. The activity of catalase in saliva as an indicator of the assessment of the antioxidant potential of the organism (laboratory class). Planning a menu on an individual level.	U1, U2, K1	Laboratory exercises

Course advanced

Activities	Methods of conducting classes
Lecture	Problem lecture
Laboratory exercises	Case study, Discussion, Problem solving

Activities	Examination method	Percentage
Lecture	Written credit	50%
Laboratory exercises	Written credit	50%

Activities	Credit conditions
Lecture	Written exam from the part of the lecture.
Laboratory exercises	Written tests from class materials, and reports from classes (in students' notebooks).

Literature

Obligatory

1. Erdman JW, Macdonald IA, Zeisel AH (ed.): Present Knowledge in Nutrition. 10th edition, International Life Science Institute Press 2012.
2. Mahan LK, Escott-Stump S, Raymond JL (ed.): Krause’s Food and the Nutrition Care Process. 13rd edition, Elsevier Saunders Press 2012.
3. Food Table Contents, for example: www.matvaretabellen.no, fdc.nal.usda.gov, livsmedelsverket.se/soknaringsinnehall

Calculation of ECTS points

Activity form	Activity hours*
Lecture	20

Laboratory exercises	30
Preparation for the test	15
Preparation for the exam	20
Self-study on the content covered in class	10
Preparation of the report	5
Student workload	**Hours** 100
Number of ECTS points	**ECTS** 4

* hour means 45 minutes