Freie Universität Bozen
Libera Università di Bolzano
Università Liedia de Bulsan

Syllabus
Course description

Course title	Dietetics, food allergies and intolerances
Course code	40422
Scientific sector	MED/49
Degree	Bachelor in Enogastronomy in Mountain Areas
Semester	1°
Year	3°
Academic Year	2024/25
Credits	6
Modular	No

Total lecturing hours	36
Total lab hours	24
Attendance	*Not compulsory, but strongly suggested*
Course page	https://www.unibz.it/it/faculties/agricultural-environmental-food-sciences/bachelor-enogastronomy-mountain-areas/

Specific educational objectives	The course pertains to the group of characterizing disciplines. It provides a general overview of scientific contents in the domain of human nutrition and dietetics. Educational objectives: knowledge on the anatomy and physiology of the digestive tract, on the principles at the basis of the digestion and absorption of macronutrients; the function and quality of macro- and micronutrients, water, and alcohol. The course will also provide the basics of the nutritional quality of foods and define and provide insights on the concept of "food groups". The "dietetics" part of the course will provide knowledge on energy requirements and energy balance between daily intake and energy expenditure. The program will then discuss the energy and nutrient needs of the population and scientific basis to estimate nutrient requirements and the recommended dietary allowances for the Italian population (LARN), the national Dietary Guidelines for the Italian population. A final focus will then be on the concepts of food allergy and food intolerance, with a basic explanation of the mechanisms underlying these phenomena and effective ways to face them from a nutritional standpoint.

Lecturer	Furio Brighenti
Scientific sector of the	MED/49; BIO/09

lecturer	
Teaching language	English
Office hours	
Teaching assistant *(if any)*	
Office hours	
List of topics covered	HUMAN NUTRITION: Physiology of the digestive tract; Digestion and absorption of macronutrients; Macro-, micronutrients, water, alcohol. Nutritional quality of foods; Food groups. PRINCIPLES OF DIETETICS: Description of body multicompartments and of the main techniques for measuring the body multicompartments; Energy requirement and energy balance between daily intake and energy expenditure; Methods to evaluate food energy; Energy needs of the population; Scientific basis to estimate human nutrient requirements and dietary reference values (DRVs) with a focus on dietary allowances for Italian population (LARN); Dietary Guidelines for the Italian population; Description of the principal methods used to measure food and/or nutrient intakes in population groups; Most common Food Allergies and intolerances; FOOD LABELLING.
Teaching format	Frontal lectures with the help of PowerPoint slides; Numeric exercitations with the help of spreadsheets and web resources.

Learning outcomes	Knowledge and understanding: Ability to interpretate the effect of nutrients/foods/diets on human physiology and metabolism in health. Ability to appreciate the effect of food processing on nutritional and quality of foods. The knowledge on the nutritional requirements in population groups. Applying knowledge and understanding: The basic elements for the definition of the nutritionally adequate diet for the different population subgroups. Communication skills: Knowledge and proper use of the disciplinary lexicon.

Assessment	The learning will be evaluated through a written exam administered at the end of the semester. The exam will consist into two parts (part 1: closed test + part 2: problem-solving). The topic of the written exam evaluation will be based on the whole set of contents proposed during the course and questions about all the topics will be asked in in the written exam.

Assessment language	English
Evaluation criteria and criteria for awarding marks	The closed test consists of 30 closed-ended questions. Each correct answer for closed-ended questions is evaluated 0,5 point (i.e. a maximum of 15 points). The problem-solving consists of 1 or 2 numerical questions to be solved based on data provided in the problem text; The maximum score for the problem-solving is 15 points. The final grade will be awarded as follows: Reaching at least 9 points in the closed test is needed for passing the test. Students who pass the closed test will undergo the problem-solving exam and the score of the problem-solving will then be added to that of the closed test for calculating the final score. Reaching at least 18 points in the final score (sum of points of the closed test + points in the problem-solving) is needed for passing the exam. Students that pass the closed test (e.g. 15 points) yet did not reach 18 total points (e.g. 2 points in the problem-solving = 17 points total) may decide to retain the score obtained in the closed test and ask for performing in a later date the problem-solving exam only. The exam score will be expressed in 30/30. Praise will be awarded to students who will demonstrate, beside the full final score of 30/30, the mastering of the nutritional language in the problem-solving exam.

Required readings	Lecture slides and reding material provided by the teacher during lectures.
Supplementary readings	*- SINU. LARN - Livelli di Assunzione di Riferimento di Nutrienti ed Energia. IV revisione. SICS Editore, (Milano)* *- CREA. Linee guida per una sana alimentazione. Revisione 2018. ISBN 9788833850375*