

Syllabus

Course Description

Course Title	Applied human nutrition
Course Code	44727
Course Title Additional	
Scientific-Disciplinary Sector	MEDS-08/C
Language	English
Degree Course	Master in Food Sciences for Innovation and Authenticity
Other Degree Courses (Loaned)	
Lecturers	Dr. Pedro Miguel Mena Parreno, PedroMiguel.MenaParreno@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/44390
Teaching Assistant	
Semester	First semester
Course Year/s	2
CP	6
Teaching Hours	60
Lab Hours	-
Individual Study Hours	90
Planned Office Hours	18
Contents Summary	-
Course Topics	A. RELATION BETWEEN DIETARY HABITS AND HEALTH 1) Public health nutrition, dietary patterns, and food composition databases 2) Evidencebased nutrition B. NON NUTRITIVE FOOD COMPONENTS 1) Gut microbiota, pre-, pro-, and post-biotics 2) Dietary bioactive compounds C. NUTRITION IN DIFFERENT AGES 1) Dietary needs and recommendations

	2) Nutrition in pregnancy and lactation 3) Nutrition in childhood and adolescence 4) Nutrition in the elderly D. REGULATIONS AND FOOD INFORMATION TO CONSUMERS 1) Food labeling 2) Regulations on nutrition and health claims 3) Front-of-pack (FOP) nutritional labelling 4) Other regulations of nutritional interest E. NEW TRENDS IN NUTRITION 1) Ultra-processed foods 2) Personalized nutrition and omics science applied to nutrition 3) Sustainable diet 4) Dietary protocols directed to the communities 5) Current and transversal nutritional hot topics
Keywords	
Recommended Prerequisites	Basic knowledge of biochemistry, human physiology, and nutrition.
Propaedeutic Courses	
Teaching Format	Frontal lectures will be carried out on site. Lectures will also be available through the online platform Elly. During lessons, examples and problemsolving exercises will be presented and discussed, to favor interaction with and among students. The didactic material consists mainly of the slides discussed during the lectures, available in Elly. Attendance to the lessons is strongly recommended, as well as participating to the discussion. It is important to highlight the role of Elly as a communication platform between the lecturer and the students. The material used for the lectures will be upload in the platform and will serve for the preparation of the written exam.
Mandatory Attendance	No
Specific Educational Objectives and Learning Outcomes	At the end of the training activity, the student should have acquired knowledge and skills related to 1) the effect of diets/foods/nutrients on human metabolism in the various physiological states, 2) the role of foods in the maintenance of human health and well-being, 3) basic information related to consumer information regulations, and 4) current trends in nutrition.

	Knowledge and understanding skills: Understanding how foods and nutrients affect the human organism in different physiological statuses, and how certain dietary choices may prevent the development of some chronic diseases. Knowing the basic concepts of the European regulations on food labeling for both mandatory and voluntary information. Understanding current topics such as processed foods, personalized nutrition and diet sustainability. Applying knowledge and understanding: Being able to understand how foods and particular diets can influence the human organism. Independent judgment: Being able to critically evaluate the quality of nutritional information on diets and foods disseminated by the press, the web and other information sources. Communication skills: Being able to present scientific studies to support or against a nutritional case study. In addition, discussion with the lecturer will serve to boost the implementation of the knowledge and skills acquired. Learning skills: Improving or updating his/her own nutrition knowledge through the autonomous use of books, papers, and databases related or not to this discipline.
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	Final examination will be carried out through an oral interview with 5 questions. Maximum question mark for these questions is 6 points. The ability to synthesize and link the topics will be particularly rewarded. Maximum mark for the test is 30, while the minimum to pass the exam is 18 points. Oral exams will be conducted all along the academic year at the dates indicated through the Esse3 platform for official exams. Please note that the online registration for the exam is compulsory. The praise (lode, honors) are granted when reaching the maximum mark and demonstrating a deep knowledge of the disciplinary lexicon.

	As an alternative to the oral exam, the student may decide to prepare a presentation including all the aspects discussed during the course, with the aim of developing a new, nutritionally-balanced food presenting an adequate nutritional labelling and being able to match the nutritional needs of a specific population group, considering also the positioning of the product in the context of new nutritional trends. The presentation will be prepared following the indications and timing provided by the professor during lessons. The presentation will be discussed with the professor. Maximum mark for the test is 33, while the minimum to pass the exam is 18 points.
Evaluation Criteria	
Required Readings	1. Mariani Costantini, Cannella, Tomassi: ALIMENTAZIONE E NUTRIZIONE UMANA - il Pensiero Scientifico (Roma). Terza edizione, 2016. 2. Rivellese, Annuzzi, Capaldo, Vaccaro, Riccardi: NUTRIZIONE UMANA - Idelson-Gnocchi (Napoli). 2017. 3. Riccardi, Pacioni, Giacco, Rivellese: MANUALE DI NUTRIZIONE APPLICATA - Idelson-Gnocchi (Napoli). 2021. V edizione. 4. Lean, Combet: BARASI'S HUMAN NUTRITION: A HEALTH PERSPECTIVE, Third Edition - CRC Press - Taylor & Francis (Boca Raton, FL), 2017. 5. Ross, Caballero, Cousins, Tucker, Ziegler: MODERN NUTRITION IN HEALTH AND DISEASE, 11 ed. - Lippincott Williams & Wilkins (Philadelphia). 2014. 6. Cozzani, Dainese: BIOCHIMICA DEGLI ALIMENTI E DELLA NUTRIZIONE - Piccin (Padova), 2006. 7. Società Italiana di Nutrizione Umana (SINU): Livelli di Assunzione di Riferimento di Nutrienti ed Energia per la popolazione italiana (LARN), IV revisione. 2014. 8. Crea: Linee guida per una sana alimentazione. 2018. https://www.crea.gov.it/web/alimenti-e-nutrizione/-/linee-guida-per-una-sana-alimentazione-2018
Supplementary Readings	
Further Information	Time for students' reception: To be agreed upon a phone call (+39 0521 90 3970) or an e-mail (pedro.mena@unipr.it).

Sustainable Development Goals (SDGs)	Zero hunger, Responsible consumption and production, Good health and well-being
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