

## Syllabus

### Course description

<b>Course title</b>	EXPOSURE ASSESSMENT AND RISK/BENEFIT EVALUATION
<b>Course code</b>	44733
<b>Scientific sector</b>	BIO/09
<b>Degree</b>	Food Sciences for Innovation and Authenticity
<b>Semester</b>	1 <sup>st</sup>
<b>Year</b>	II
<b>Academic year</b>	2022/23
<b>Credits</b>	4
<b>Modular</b>	No

<b>Total lecturing hours</b>	40
<b>Total exercise hours</b>	
<b>Attendance</b>	In presence
<b>Prerequisites</b>	none
<b>Course page</b>	

<b>Specific educational objectives</b>	<p>The course will provide a general overview of scientific contents about the importance to evaluate the intake of nutrients and other bioactive substances through the formal analysis of the exposure assessment to food and diet. It will serve as well as a guide for acquiring professional skills and knowledge related to the use of such skills in the food industry's research and development activity.</p> <p>In particular, at the end of the training activity, the student will acquire knowledge and skills related to the significance and methods to carry out a proper exposure assessment and risk/benefit evaluation for nutrients and other food components.</p> <p>The course may be chosen as optional course for the Human Nutrition Curriculum, taught at the University of Parma</p>
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<b>Lecturer</b>	Furio Brighenti
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<b>Learning outcomes</b>	<p>As a result of the activity, and as main learning outcomes, the student will be able to:</p> <p>About knowledge and understanding skill: 1) Interpret dietary recommendations; 2) Choose and evaluate the best dietary assessment method and instrument according to the assessment</p>
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	<p>purpose; 3) Evaluate and use a nutritional database;</p> <p>About applying knowledge, the student will be able to:  1) critically and adequately analyze results originating from dietary intake and biomarker assessment; 2) critically evaluate emerging dietary relevant non-nutrient components potentially involved in the preservation of health and on reduction of disease risk; 3) merge knowledge into the critical evaluation of the risk/benefit ratio intrinsic in human nutrition.</p> <p>About communication skills, the student will be able to present scientific issues in support or against a nutritional case study.</p> <p>About learning skills, the student will be able to research, describe and summarize case studies through activities carried out in autonomy and/or in small groups.</p>
<b>Assessment</b>	Written and project work: written exam with review questions and written project report done singularly or in groups
<b>Assessment language</b>	English
<b>Evaluation criteria and criteria for awarding marks</b>	<p>Final examination will be carried out through an oral interview, which may include the critical discussion of projects carried out by the student during the semester. If it is impossible to take the exam face-to-face due to rules imposed by the University, the exam will be carried out remotely through an interview through the Teams portal.</p> <p>The final evaluation, in 30/30 score points, will depend on the assessment of the level of knowledge of the contents discussed during the course, of the ability to use sources of scientific information and on the following aspects:</p> <ul style="list-style-type: none"> <li>- 25% Knowledge application;</li> <li>- 25% Ability to analyze complex dataset and cases and draw conclusions;</li> <li>- 25% Communication skills;</li> <li>- 25% Ability to gain knowledge. The praise is assigned in the case of reaching the maximum score on each item to which is added the mastery of the disciplinary lexicon</li> </ul>
<b>Required readings</b>	Slides and reading material discussed during classes provided through the ELLY portal of the University of Parma
<b>Supplementary readings</b>	<p>1) Keith Frayn &amp; Rhys Evans. Human Metabolism: A Regulatory Perspective. 4th Ed. Wiley Blackwell 2019, Oxford (UK).</p> <p>2) David A. Bender Introduction to Nutrition and Metabolism. 5th Ed. CRC Press, 2014, Boca Raton, FL</p>



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	(USA) 3) Selected scientific papers.
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