Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Food Allergens: Molecular Approaches and Regulatory aspects
Code der Lehrveranstaltung	44768
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	CHEM-05/A
Sprache	Englisch
Studiengang	Master in Lebensmittelwissenschaften für Innovation und Authentizität
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	O. Univ. Prof. Tullia Tedeschi, https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/55174
Wissensch. Mitarbeiter/Mitarbeiterin	
Semester	Erstes Semester
Studienjahr/e	2
KP	6
Vorlesungsstunden	60
Laboratoriumsstunden	-
Stunden für individuelles Studium	90
Vorgesehene Sprechzeiten	18
Inhaltsangabe	-
Themen der Lehrveranstaltung	- Clinical aspects of food allergies - Epidemiology of food allergies - Allergenic proteins - Methods for detection of allergens in food

	- Effect of processing on allergens - Threshold values for allergens in food - Allergens risk assessment - Management of allergen risk during food production. - Case studies - Celiac disease - European and international legislation on allergens in food
Stichwörter	
Empfohlene Voraussetzungen	
Propädeutische Lehrveranstaltungen	
Unterrichtsform	The course takes place during 48 hours of frontal lectures. During these hours, the students are guided to understand the basic and applicative concepts related to food allergies, by slide projection accompanied by explanations and with frequent interactive discussions, in order to develop a solid theoretical knowledge of food allergies that can serve as basis for a practical approach to their management and evaluation. Few lessons will be dedicated to discussion of case of studies, lectures on selected topics.
Anwesenheitspflicht	No
Spezifische Bildungsziele und erwartete Lernergebnisse	Knowledge and understanding The student, at the end of the course, will know the different types of food allergies and which risks consumers face in the different contexts. He/she will have a thorough knowledge of allergenic proteins and of the structure-allergenicity relationship. He/she will know the principles that allow to predict the potential allergenicity of new proteins. He/she will have an in-depth critical knowledge of the various analytical methods available for evaluating the content of allergens in food. He/she will know the different approaches to manage allergen risk in a production context. He/she will know the impact of the technological processes on the structure of allergens, and which methodologies can be used to produce hypoallergenic compounds. Finally, he/she will know the different legislative approaches at international level for the management of allergen risk in the food chain. Ability to apply knowledge and understanding

	The student, at the end of the course, will be able to evaluate the allergenic potential of the various foods, including novel foods and foods for which there are insufficient data. He/she will be able to apply the most suitable analyses to assess the allergen content in the different contexts in the food supply chain and in the different foods. He/she will be able to make data-driven decisions for the best possible allergen risk management in the food supply chain. He/she will be able to evaluate and consider the impact of the process on allergenicity, and design processes that can lead to hypoallergenic foods. Finally, he/she will be able to adapt the analyses to be carried out and the processes to be applied in order to carry out an assessment and management of the allergenic risk, also being the most adequate with respect to the specific legislative context.
Spezifisches Bildungsziel und erwartete Lernergebnisse (zusätzliche Informationen)	
Art der Prüfung	The exam is based on a written test containing open questions, also with applicative aspects, for the students to be answered. Participation in the test is possible ONLY after registration through the ESSE3 system. Students not officially registered will not be admitted to take the test. There will be 7 different sessions of test per year. The time for the test is 2 hours. During the test the student can withdraw, and in this case the test is not corrected and the result will be recorded in the ESSE3 system as WITHDRAWAL. The results of the written test will be published on ESSE3 and each student will receive an email with the result. The test is considered passed and the grade can be officially recorded if the grade of the test is equal to or higher than 18. In case of a grade lower than 18, the test will have to be repeated. In the event of a grade equal to or greater than 18, the student has two options: - Accept the vote received, which will then be officially recorded - Reject the vote using the specific option in ESSE3, and repeat the exam. Attention: the refusal must be explicit, the silence-assent rule applies.
Bewertungskriterien	

Pflichtliteratur	- "Risk Management for Food Allergy", edited by C.B. Madsen,R.W.R. Crevel, C. Mills, S.L. Taylor, Elsevier Academic Press - Scientific Opinion on the evaluation of allergenic foods and food ingredients forlabelling purposes, EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA), European Food Safety Authority (EFSA)
Weiterführende Literatur	
Weitere Informationen	All slides used in class are provided to students at the beginning of the course through the ESSE3 system. The lecturer is available for clarifications and discussions at the end of the lessons, and he is also available to provide further clarifications at his office, by appointment by e-mail, or through online appointments.
Ziele für nachhaltige Entwicklung (SDGs)	Gesundheit und Wohlergehen