

Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Bakery and Confectionery Product Development: Nutrition Innovation and Sustainability
Code der Lehrveranstaltung	44769
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	AGRI-07/A
Sprache	Englisch
Studiengang	Master in Lebensmittelwissenschaften für Innovation und Authentizität
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	Dott. Franco Antoniazzi, Franco.Antoniazzi@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/45229
Wissensch. Mitarbeiter/Mitarbeiterin	
Semester	Erstes Semester
Studienjahr/e	2
KP	2
Vorlesungsstunden	20
Laboratoriumsstunden	-
Stunden für individuelles Studium	30
Vorgesehene Sprechzeiten	6
Inhaltsangabe	-
Themen der Lehrveranstaltung	A. Context and market directions • Global evolution of food trends • Clean label approaches and implications for formulation

	B. Ingredients and technological functionality • Sugars, syrups, and sweetening alternatives • Lipids: structure-building role and nutritional impact • Additives: functions, use criteria, and alternatives C. Regulation, safety, and consumer information • Allergens • Nutrition and health claims • Coeliac disease and gluten-free products D. Applications across product categories • Bread • Bakery products • Milk and dairy products • Confectionery • Chocolate • Coffee, tea, and stimulant ("nervine") beverages E. Environmental dimension • Sustainability in food systems
Stichwörter	
Empfohlene Voraussetzungen	
Propädeutische Lehrveranstaltungen	
Unterrichtsform	In-person and online lectures, including guest lectures by professionals from the food manufacturing sector, with particular emphasis on nutritional implications.
Anwesenheitspflicht	No
Spezifische Bildungsziele und erwartete Lernergebnisse	This course provides tools to understand how food technologies can support reformulation and nutritional improvement in bakery and confectionery products. Core phenomena occurring along key production stages will be addressed, adopting an integrated perspective (technology, nutrition, regulation) to critically evaluate choices made in new product development. Students will learn to balance technical feasibility with the regulatory framework, guiding product changes toward nutritional and environmental sustainability goals.
Spezifisches Bildungsziel und erwartete	

Lernergebnisse (zusätzliche Informationen)	
Art der Prüfung	Assessment, through a formal product presentation, will be based on: • knowledge and understanding • use of knowledge • ability to draw autonomous conclusions • communication skills • ability to learn and identify critical points
Bewertungskriterien	
Pfichtliteratur	Slides provided before each lecture G.B. Montanari – Omnia fermenta, Chiriotti 2020 P. Barham – The science of cooking, Springer 2000 H.P. Newquist – The book of Chocolate, Viking 2017 J. Hoffmann – The world Atlas of coffee, London 2018 P. Behrens – Food and Sustainability, Oxford 2020
Weiterführende Literatur	
Weitere Informationen	
Ziele für nachhaltige Entwicklung (SDGs)	Nachhaltiger Konsum und Produktion