Syllabus

Course Description

Course Title	Food value chain management
Course Code	44703
Course Title Additional	
Scientific-Disciplinary Sector	AGR/01
Language	English
Degree Course	Master in Food Sciences for Innovation and Authenticity
Other Degree Courses (Loaned)	
Lecturers	Prof. Dr. Christian Diethard Fischer, Christian.Fischer@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/9009
Teaching Assistant	
Semester	First semester
Course Year/s	1st
CP	6
Teaching Hours	48
Lab Hours	12
Individual Study Hours	90
Planned Office Hours	15
Contents Summary	The course Food Value Chain Management provides a comprehensive overview of key aspects of food value chains, from production to consumption. It begins with core definitions and explores the importance of collaboration, communication, and innovation among stakeholders. Students learn about information management, traceability, and the role of logistics in minimizing waste and losses. The course addresses all stages of the chain, including farming, processing, distribution, and consumer perspectives. It concludes with student project presentations and exam preparation.

Course Topics	The course will cover the following topics: 1. Introduction, context and definitions 2. Consumers 3. Distribution 4. Processing/transformation 5. Raw material production (farming) 6. Collaboration, relationships and communication 7. Information management and traceability 8. Logistics, losses and waste 9. Collaborative innovation 10. Presentation of study project results 11. Summary and exam preparation
Keywords	Food value chain economics and management Horticultural supply chain management Food value chain innovation management
Recommended Prerequisites	None
Propaedeutic Courses	None
Teaching Format	Frontal lectures, discussions and project work
Mandatory Attendance	No
Specific Educational Objectives and Learning Outcomes	Knowledge and understanding: Knowledge of the regulatory aspects governing the production and commercialization of traditional, typical, and innovative foods, and the related control systems, including company quality systems (ISO, BRC, IFS, GlobalGAP, traceability and tracking, supply chain and product certifications) and the methodologies for their implementation and management. Understanding of the managerial and organizational dynamics of agri-food chains. These knowledge areas will be developed through an educational program that integrates theoretical teaching activities with classroom tutorials, including examples, practical applications, individual and group work, and assessments aimed at encouraging active participation and independent solution development. These knowledge areas will be developed through an educational program that integrates theoretical teaching activities with practical activities, such as laboratory exercises, computer simulations, simulations of food processes using pilot plants, and company visits.

	Ability to apply knowledge and understanding: Ability to select and manage operations related to the traceability, authenticity, and microbiological safety of ingredients, semi-finished products, and food products, including quality assurance systems and product and process certification. Ability to solve problems related to the organization of production, logistics, and management of agri-food chains. Making judgements: At the end of the course, graduates will be able to analyse the main issues affecting food production systems. They will be able to identify corrective solutions to resolve any non-conformities, optimise and innovate transformation processes, and improve food quality, guaranteeing authenticity. Independent judgement is developed through a training programme designed to stimulate critical analysis in students. This includes the use of case studies, simulations using spreadsheets and videos, the reading and critical discussion of scientific articles, as well as specialist seminars held by experts in the food sector. The assessment of the independent judgement acquired by students is entrusted to the individual teachers responsible for the training activities, who will assess it through oral and/or written reports on specific topics and/or through exams. Communication skills: Use of the English language, both written and spoken, at a B2 level, with a command of technical and scientific vocabulary related to food science. Present the contents of a scientific or technical report in a clear and understandable manner, even to a non-specialist audience. Structure and draft scientific and technical documentation describing project activities. Prepare and present technical reports in English on specialist topics; Interact and collaborate in the design and development of products and processes with peers and industry experts. Learning skills: The degree course provides graduates with the cognitive skills,

	logical tools and familiarity with new information technologies necessary to ensure continuous updating of knowledge, both in their specific professional field and in the field of scientific research.
Specific Educational Objectives and Learning Outcomes (additional info.)	This is a base-knowledge course in the area of agricultural and food economics that is taught in the first year of the master programme. The course aim is the transfer of general research-based knowledge and methods. The course may be attended simultaneously by students of other unibz master programmes. The course introduces into the topic of modern food value/supply chain economics and management. Theoretical concepts as well as practical approaches to value/supply chain management are presented and discussed. The focus is on agricultural commodities (in particular fruit) as well as on processed food products. The discussion of practical examples and potentially excursions to projects and organisations operating in food value/supply chains complements the course work. Thus, students should gain an overview of the use of value/supply chain management instruments and to understand their practical use. The course follows a classical lecture format, supplemented by exercises and student project work. Depending on the course participant numbers one or several excursions may be organized. For the study projects, students will have to work in groups on a specific topic and present their results to the entire course.
Assessment	Student performance assessment will be based on a final written exam and an oral presentation. The written exam will last up to 180 minutes and is made up of 3–8 examination questions. The study project outcomes will be assessed by a final presentation of the project results.
Evaluation Criteria	The evaluation consists of a written final exam (70% of the overall course mark) and the presentation of the results from the project work (30% of the overall mark).

	The written exam will be evaluated based on the correctness, clarity of answers, the ability to summarize, evaluate and establish connections between topics and the ability to apply methods and theories. The study project work of all three modules will be evaluated on the basis of the content and the format of the presentation and the quality of the oral speech.
Required Readings	Lecture slides and materials
Supplementary Readings	• Fawcett, S., Ellram, L. and Ogden, J. (2007): Supply Chain Management – From Vision to Implementation. Pearson Prentice Hall, Upper Saddle River, NJ, USA. • Fischer, C. and Hartmann, M. (2010): Agri-food Chain Relationships. CAB International, UK and US. • Other recent scientific reports, articles and materials
Further Information	
Sustainable Development Goals (SDGs)	No poverty, Responsible consumption and production, Good health and well-being