Syllabus

Course Description

Course Title	Sustainable supply chain management in the food sector
Course Code	89207
Course Title Additional	
Scientific-Disciplinary Sector	IEGE-01/A
Language	Italian
Degree Course	Studium Generale - basic course
Other Degree Courses (Loaned)	
Lecturers	Prof. Guido Orzes, Guido.Orzes@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/36819 Dott. Margherita Molinaro, Margherita.Molinaro@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/43550 dr. Nunzia Zecchillo, Nunzia.Zecchillo@unibz.it https://www.unibz.it/en/home/research/competence-centre-mountain-innovation-ecosystems/teams-organs-researchers/person/47616
Teaching Assistant	
Semester	First semester
Course Year/s	1
CP	3
Teaching Hours	18
Lab Hours	0
Individual Study Hours	
Planned Office Hours	
Contents Summary	During the lectures and seminars, participants will gain a basic understanding of the principles and tools for the sustainable

	management of supply chains in the food sector. The course will provide an understanding of the main challenges and opportunities relating to sustainability throughout the supply chain, exploring aspects such as procurement, logistics, the circular economy, digital technologies and different supply chain configurations.• Introduction to supply chain management
Course Topics	• Supply chain management in the food sector: specific characteristics, challenges and risks • Sustainability and the triple bottom line: introduction and key concepts • The circular economy in the food sector • Sustainable procurement and supplier management • Physical distribution and transport management • The role of Industry 4.0 technologies in sustainable supply chain management • Supply chain configurations in the food sector: short and international supply chains, the role of large-scale retail • The bullwhip effect and supply chain coordination: practical exercise
Keywords	
Recommended Prerequisites	
Propaedeutic Courses	None. A basic understanding of the following concepts might be useful: supply chain management (terminology and definitions), sustainability.
Teaching Format	Lectures, case studies and seminars
Mandatory Attendance	
Specific Educational Objectives and Learning Outcomes	During the lectures and seminars, participants will gain a basic understanding of the principles and tools for the sustainable management of supply chains in the food sector. The course will provide an understanding of the main challenges and opportunities relating to sustainability throughout the supply chain, exploring aspects such as procurement, logistics, the circular economy, digital technologies and the various configurations of supply chains. By the end of the course, participants will be able to: • understand the distinctive characteristics, key challenges and risks associated with supply chains in the food sector; • analyse the economic, environmental and social implications of

	supply chain management decisions from a sustainability perspective; • recognise opportunities and applications of the circular economy in the food sector; • assess tools and approaches for the sustainable management of procurement and supplier relationships; • evaluate innovative solutions for the logistics, distribution and traceability of food products, including through the use of digital technologies; • compare different models of food supply chain organisation, analysing their advantages and challenges in terms of sustainability; • understand the importance of coordination and information sharing amongst supply chain stakeholders and the effects that these dynamics may have on supply chain performance. Subject-specific skills Knowledge and understanding To develop an advanced understanding of the concepts of sustainable supply chain management, as well as the activities, methods and approaches for managing the supply chain in the food sector. Ability to apply knowledge and understanding The ability to transfer the knowledge and methods learnt into real-world practical applications through group work and case studies. Transversal skills / soft skills Independent judgement The ability to critically assess any business context within the food sector and decide how to address the key characteristics and challenges that define the relevant supply chain. Communication skills To learn and correctly use key terminology relating to supply chain management and sustainability, with a particular focus on the food sector. This terminology is necessary for communicating with representatives from industry and academia.

	Learning skills The ability to independently expand upon the knowledge acquired during the course through reading and comprehension.
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	A written test comprising 15 multiple-choice questions to assess the application of knowledge and skills; there may be an oral discussion to review any incorrect answers.
Evaluation Criteria	The final mark is based on the written examination, in which the accuracy of the answers will be assessed.
Required Readings	
Supplementary Readings	
Further Information	
Sustainable Development Goals (SDGs)	