Module Title	**Logistics, Supply Chain and Network Management**
Module Code	MSLS_AF-11
Degree Programme	Master of Science in Life Sciences (MSLS)
ECTS Credits	5
Workload	150 h: Presence - Contact 55 h; Group Exercise 15 h; Self-study 80 h
Module Coordinator	**Name** Prof. Dr. Bernhard Pauli **Phone** +41 31 910 21 07 **Email** bernhard.pauli@bfh.ch **Address** Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences, Laenggasse 85, 3052 Zollikofen
Lecturers	• Prof. Dr. Bernhard Pauli • Dr. Ingrid Fromm • Guest lecturers
Entry Requirements	Knowledge of the principles of logistics, supply chains and economics / previous completion of AF-12 recommended
Learning Outcomes and Competencies	After completing the module, students will be able to: • handle important terms and theories of logistics properly; • apply relevant tools in logistics in practical situations; • describe relevant foundations of supply chain management (SCM); • understand and apply key analytical constructs to describe value chains and market systems development for agricultural, food and timber markets; • know best practice in value chain research methods; • solve selected value chain management problems; • transfer these topics to logistics, supply chain and network management in the agriculture, food and forest industries, both in a national and international context; • overview the principles of the fourth industrial revolution and understand their influence on the design of value networks.
Module Content	The module focuses on supply chain management (SCM), logistics and network management of value chains in general (generic knowledge) and in the agriculture, food and forest industries in particular, with a focus on the fourth industrial revolution. **Supply Chain and Value Chain Management** • History and basic principles of SCM • Concept of value chains • Value-chain analysis: research and assessment methods • Cost analysis in SCM • Holistic approach to value chain management: coordination, decision-making, controlling, incentives and information in a system • Value chain approaches in international cooperation **Logistics** • Logistics in procurement, production, distribution and waste disposal • Logistics at strategic, tactical and operational level • Optimisation of service level in logistics • Planning and controlling tools in logistics (PPS, PRP, MRPII, ERP, APS, etc.)

	• Methods (ABC/XYZ analysis, procurement portfolio, management of suppliers) • Procurement and storage strategies • Organisational forms and processes in logistics • Analysis and optimisation of processes in logistics • International logistics **Analysis and Conclusion** • Discussion of and reflection on logistics and SCM in the agriculture, food and forest industries.
Teaching and Learning Methods	Lectures will help to structure the vast field of logistics, SCM, network and value chain management. During seminar and exercise lessons, different tools used in value chain management, international cooperation and logistics are presented, tested and critically discussed.
Assessment of Learning Outcomes	1) Case study (group work) on value chain management (30%) 2) Case study (group work) on logistics (30%) 3) Final exam (40%)
Bibliography	Christopher M, 2012. Logistics and Supply Chain Management: creating value-adding networks (4th edition). FT Press, 288 p. GTZ Eschborn 2007. The Value Links Manual – The Methodology of Value Chain Promotion, First Edition. Rushton A, Croucher P, Baker P, 2010. The Handbook of Logistics & Distribution Management (4th edition). Kogan Page, London/Philadelphia/New Delhi, 636 p. Kaplinsky, Raphael and Morris, Mike (2002). A Handbook for Value Chain Research. Institute of Development Studies. For case studies and further reading, additional documents will be made available on Moodle one month before the start of the module.
Language	English
Comments	This module is in presence. The sequences with guest lecturers and the presentations of case studies are compulsory for students. The detailed schedule with the dates of the compulsory sequences will be uploaded on Moodle four weeks before the start of the module.
Last Update	May 2026