



Module	Managing the Food Supply Chain
Code	MSLS_V1_3
Degree Programme	Master of Science in Life Sciences (MSLS)
ECTS Credits	5
Workload	150 h: Contact 77 h; Self-study 73 h
Module Coordinator	<p>Name Dr. Christoph Lustenberger, Dr. Tatiana Starostina</p> <p>Phone +41 (0)58 934 56 16</p> <p>Email christoph.lustenberger@zhaw.ch, tatiana.starostina@zhaw.ch</p> <p>Address ZHAW Zürcher Hochschule für Angewandte Wissenschaften Life Sciences and Facility Management Campus Reidbach Postfach CH-8820 Wädenswil</p>
Lecturers	<ul style="list-style-type: none"> • Dr. Christoph Lustenberger • Dr. Tatiana Starostina • Prof. Dr. Selçuk Yildirim • Members of the Food Packaging Research Group • Guest lecturers
Entry Requirements	Basic knowledge of business administration
Learning Outcomes and Competences	<p>After completing the module students</p> <ul style="list-style-type: none"> • can assess the interplay of all the operational components of a supply chain. • are aware of measures for planning and designing the supply chain. • can assess the possible effects of strategic approaches to supply chain design. • are familiar with the planning and design principles of procurement, production and distribution processes. • are familiar with a selection of current methods and tools for the management of company networks. • are aware of the connections between the areas of supply chain management and supply chain software. • can correctly use selected logistics tools. • are aware of the importance of food packaging design and know the main packaging design elements • are familiar with the novel packaging technologies and materials • know the main factors affecting the sustainability of a packaging and how the sustainability of the packaging is evaluated • know the existing biopackaging materials and those in development and can evaluate their potentials as sustainable packaging materials

Module Content	<p>The module covers basic concepts and success factors for efficient supply chains in the food industry, taking into consideration new technologies, emerging trends, shifting demographics and changing markets. On the basis of keynote speeches and workshops led by experts from the food industry and supported by excursions to food production and logistics companies, the topics of procurement, production, distribution, planning and returns are explored.</p> <p>Logistics management, business relations and logistics networks are major themes, as well as business processes, business methods and long-term planning in the processing industry. The priorities are novel and sustainable packaging materials and processes.</p> <p>In the food industry, packaging plays an important role within the supply chain. Packaging systems and functions are given in-depth attention according to their importance. The priorities are packaging materials, food and packaging interactions, packaging operations and new packaging technologies.</p> <p>Environmental aspects and sustainability issues in supply chain management and packaging are addressed throughout the module.</p>
Teaching / Learning Methods	<ul style="list-style-type: none"> • Lectures • Workshops • Case studies • Experiments at laboratory • Exercises • Excursions • Literature study
Assessment of Learning Outcome	<p>Written exams and presentation or report (Supply Chain Management, Food Packaging)</p> <ul style="list-style-type: none"> • 2/3 course Supply Chain Management • 1/3 course Food Packaging
Bibliography	<ul style="list-style-type: none"> • Chopra S., Meindl. (2015): Supply Chain Management, Pearson ISBN:978-1-292-09356-7 • Goldratt E., Cox J., (2013): Das Ziel, Campus Verlag ISBN: 978-3-593-39853-2 • Slack N., Brandon-Jones A., Johnston R. (2016): Operations Management • Yildirim, S., et al., Active Packaging Applications for Food. Comprehensive Reviews in Food Science and Food Safety, (2018). 17(1): p. 165-199. • Verghese, Lewis, Fritzpatrick, (2012): Packaging for sustainability • David Plackett (2011): Biopolymers – New Materials for Sustainable Films and Coatings
Language	English
Comments	
Last Update	30.03.2023