



## Winter University Programme – Course Outline

# Logistics Module: Sustainable Supply Chains

### CLASS HOURS

Consult program schedule

### Academic Directors

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## 1) INFORMATION ON THE COURSE CONTENT

### COURSE DESCRIPTION

The over-exploitation of natural resources required to achieve economic growth and development has had a negative impact on the environment while also causing these resources to become scarcer and costlier. It is therefore easy to see why the idea of a circular design of products and systems that offers new ways to create more sustainable supply chain models, is taking hold across the globe. This module is designed to help you understand the growing business case for sustainable supply chain solutions covering topics from environmental social governance in supply chain and supplier management, carbon accounting, green and sustainable distribution and innovative technology solutions. Participants will learn how to design, manage and lead a sustainable supply chain by incorporating circular material, product and system design into your strategies to support sustainable growth. Different requirements of supply chain tiers and various industries such as automotive, retail, pharmaceutical and chemical supply chain are considered in this module.

This module is composed of lectures, tutorials and excursions that provide knowledge about the application of sustainable concepts and approaches in different local, regional and global supply chains.

The teaching and learning contents and objectives as well as the structure of the module are geared mainly towards students of supply chain management, logistics or economics and business administration with specialization in supply chain management. Students with a different academic background should get in touch with the program coordinator to check whether participation is possible or not.

### LEARNING OBJECTIVES

To provide an introduction to the basic concepts of sustainable supply chains. Students should be able to conceptualize a sustainable supply chain approach for a specific business, dedicated product and for regions.

### COURSE MATERIALS

To be added later

## TENTATIVE CLASS SCHEDULE

Part 1: conducted as an **online lecture**. The class schedule might be subject to change.

November 1, 2021	Introduction in sustainable Supply Chain Management with focus on Germany, Europe and International
November 8, 2021	Importance of supply chain transparency, Environmental Social Governance in supply chain management, supply chain resilience and risk management
November 15, 2021	Carbon accounting and CO2 neutrality in global supply chains
November 22, 2021	Green mobility networks
November 29, 2021	Sustainable last mile concepts
December 6, 2021	Reverse logistics approaches & „cradle to cradle“ designs in supply chain
December 13, 2021	Technology trends and IT solutions supporting sustainable supply chains
December 13, 2021	Handout of project work topics

Part 2: will be held as **in-class seminars in combination with excursion** to relevant companies and supply chains.

January 3, 2022	Welcome and opening seminar. Waste avoidance and material selection in sustainable supply chains
January 4, 2022	Visit of the h-da logistics lab with various self-trial opportunities
January 5, 2022	Guest speaker & excursion to retail industry
January 6, 2022	Excursion to technology hub with 3D-printing, drones and automated transportation systems
January 7, 2022	Tutorial: preparing final exam/presentation
January 10, 2022	Guest speaker & excursion of KEP industry
January 11, 2022	SCM transparency: Beer Game simulation game
January 12, 2022	Guest speaker & excursion of chemical industry
January 13, 2022	Tutorial: preparing final exam/presentation
January 14, 2022	Final presentation

## 2) INFORMATION ON CLASS PARTICIPATION, ASSIGNMENTS AND EXAMS

### ASSIGNMENTS

Active participation and group work on a regular basis.

### EXAMS

Group presentation of a project assignment and answering questions related to the project work.

### PRACTICE MATERIALS

Online manuscripts to be prepared and distributed among the participants via Moodle (online learning system).

### PROFESSIONALISM & CLASS PARTICIPATION

Students are expected to attend the classes and dedicate 1-2 hours a day for preparation through reading and self-study. The participation and self-study will enable the students to answer questions, lead discussions and to contribute with own ideas and opinions.

### MISSED CLASSES

No more than 10% of the contact hours can be missed for successful completion of the course module. If students miss a lecture or tutorial it is their own responsibility to obtain information on the topics. In the event of sickness, a medical certificate must be presented to the Winter University Programme coordinator.

### 3) INFORMATION ON GRADING AND ECTS

#### ACADEMIC STANDARDS

Upon successful completion, 4 ECTS will be awarded for the class.

According to the rules of ECTS, one credit is equivalent to 25-30 hours student workload.

#### GRADING SCALE

Percentage	Grade		Description
90-100%	15 points	1.0	very good: an outstanding achievement
	14 points		
	13 points	1.3	
80-90%	12 points	1.7	good: an achievement substantially above average requirements
	11 points	2.0	
	10 points	2.3	
70-80%	9 points	2.7	satisfactory: an achievement which corresponds to average requirements
	8 points	3.0	
	7 points	3.3	
60-70%	6 points	3.7	sufficient: an achievement which barely meets the requirements
	5 points	4.0	
0-60%	4 points	5.0	not sufficient / failed: an achievement which does not meet the requirements
	3 points		
	2 points		
	1 point		
	0 points		

This course description was issued on May 11, 2021. The program is subject to change.