

Blended Intensive Program Sustainable Supply Chain Management – Course Outline

Logistics Module: Sustainable Supply Chain Management

CLASS HOURS

Consult program schedule

Academic Directors Hochschule Darmstadt (Host)

Name: Prof. Dr. Johanna Bucerius

email: Johanna.bucerius@h-da.de

Name: Prof. Dr. Monika Futschik

email: monika.futschik@h-da.de

Academic Partners Université de Technologie de Troyes

Name: Prof. Dr. Murat Afsar

email: hasan_murat.afsar@utt.fr

Academic Partners La Universidad Politécnica de Cartagena

Name: Prof. Dr. Francisco Campuzano Bolarín

email: Francisco.Campuzano@upct.es

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 supply chain models and carbon-neutral supply networks is taking hold across Europe and 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, sustainable distribution and simulation 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 carbon accounting methods are considered in this module.

This module is composed of online lectures on the theoretical basics on sustainability and supply chain management and of excursions and field trips to gain hands-on experience and meet sustainability experts. The “on site”-part will take place at Hochschule Darmstadt in Germany.

The teaching and learning contents and objectives as well as the structure of the module are geared mainly towards Bachelor and Master students of economics, business administration, logistics and industrial engineering.

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

<i>Date</i>	<i>Topic</i>	<i>Type of Seminar</i>
March 11, 2024	Virtual opening and (Online) Seminar: Introduction sustainable Supply Chains Management	Online 4.00 – 5.30 pm
March 18, 2024	(Online) Seminar: Circular economy, revers logistics systems, cradle-to-cradle design	Online 4.00 – 5.30 pm
March 25, 2024	(Online) Seminar: Environmental Social Governance in SCM	Online 4.00 – 5.30 pm
April 3, 2024	(Online) Seminar: Best Practise examples of real sustainable Supply Chains & Guest speaker	Online 4.00 – 5.30 pm
April 8, 2024	(Online) Seminar: Introduction to Supply Chain Simulations I	Online 4.00 – 5.30 pm
April 15, 2024	(Online) Seminar: Building a Supply Chain Simulations II	Online 4.00 – 5.30 pm
April 22, 2024	(Online) Seminar: Distribution networks, transportation modes and vehicles & group nomination	Online 4.00 – 5.30 pm
April 29, 2024	(Online) Seminar: Optimization of routing / service design I	Online 4.00 – 5.30 pm
May 6, 2024	(Online) Seminar: Optimization of routing / service design II	Online 4.00 – 5.30 pm
May 13, 2024	(Online) Seminar: CO2 neutrality in global supply chains & Case Study introduction	Online 4.00 – 5.30 pm
May 20, 2024	(Online) Seminar: Carbon Accounting	Online 4.00 – 5.30 pm
Jun 17, 2024	(Online) Seminar: training with AEP software & check-in case study	Online 4.00 – 5.30 pm
June 30, 2024	Arrival in Darmstadt	
Jul 1, 2024	Excursion: guided tour through the innovation and start-up center HUB31 with focus on sustainably technology solutions e.g. e-boats, drones and automated transportation systems and seminar on Sustainability in Supply Chains at AEP solutions GmbH evening: Darmstadt city tour	On-site (Darmstadt)
Jul 2, 2024	Excursion: Merck pharmaceutical site tour and expert talks to Merck's Sustainability Manager evening: Public viewing event UEFA EURO 2024 soccer	On-site (Darmstadt)
Jul 3, 2024	Excursion: Guided tour through Amazon distribution center and workshop on sustainability in Supply Chains evening: leisure time	On-site (Darmstadt)
Jul 4, 2024	Excursion to BASF cross-docking point for trucks, trains and ship. One of the biggest in Europe. evening: Climbing tree park Darmstadt	On-site (Darmstadt)
Jul 5, 2024	Final presentation. Closing of BIP & Farewell event at Heinerfest	On-site (Darmstadt)
Jul 6, 2024	Departure from Darmstadt	

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. (80%)

Written test on sustainability in Supply Chain Management (20%)

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 Blended Intensive 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 December 2023. The program is subject to change.