

Hessen International Summer University 2024 – Course Syllabus

<https://isu.h-da.de/>

Course: Sustainable Supply Chains

CLASS HOURS

Consult program schedule on our website.

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.

The teaching and learning contents and objectives as well as the structure of the course 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

Class hours virtual: 12 contact hours

Class hours on-site: 90 contact hours

Self-study (virtual & on-site; including virtual group work): 100 contact hours

Total: 202 contact hours (1 contact hour = 45 minutes)

| <i>Date</i> | <i>Topic</i> | <i>Type of Seminar</i> |
|--------------------------|---|------------------------|
| May 2024 | Virtual pre-arrival meeting | Online |
| Late May/early June 2024 | Virtual group project | Online |
| June 27, 2024 | Arrival in Darmstadt | Darmstadt |
| June 28, 2024 | Welcome session, city tour, campus tour, welcome dinner | Darmstadt |
| June 29, 2024 | Intercultural training | Darmstadt |
| June 30, 2024 | Traveling to Berlin | |
| July 01, 2024 | Company visits Berlin: Morning: Discussion round with a member of parliament (confirmed) Afternoon: Tesla Giga Factory (planned) | Berlin |
| July 02, 2024 | Company visits Berlin: Morning: Line hydrogen refueling station (planned) Afternoon: pi4 robotics – self-driving delivery robots (planned) | Berlin |
| July 03, 2024 | Free time in Berlin | Berlin |
| July 04, 2024 | Traveling back to Darmstadt | |
| July 05, 2024 | Seminar: lecture introduction sustainable last mile delivery concepts (cargo tram, cargo bike, iHub, micro-hubs, last mile walker, delivery robots, sharing delivery solutions, ...); introduction group assignment | Darmstadt |
| July 08, 2024 | Company visit: DHL Innovation Center: learn about DHL's innovative logistics solution in context of automation, sustainability and digitalization | Troisdorf |
| July 09, 2024 | Seminar: Carbon accounting and CO2 neutrality in global supply chains | Dieburg |
| July 10, 2024 | Company visit: Riese & Müller (leading cargo bike manufacturer) | Mühltal |
| July 12, 2024 | Seminar: Circular economy and reverse logistics systems | Dieburg |
| July 15, 2024 | Company visit: Porsche (e-fuels) | Stuttgart |
| July 16, 2024 | Seminar: Environmental social governance in SCM | Darmstadt |
| July 17, 2024 | Seminar: Sustainability in supply chains and best practices/technologies | Darmstadt |
| July 19, 2024 | Seminar: Final Presentations | Darmstadt |
| July 20, 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.

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, 9 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 November 29, 2023. The program is subject to change.