



AURORA

Environmental Economics: Sustainable supply chain management

Focus Lecture

In the lecture we will focus on assessing and measuring sustainable development from macro to micro levels with different normative perspectives along the supply chains systems. These perspectives include environmentally driven assessments, supply chain normative, closed loop supply chains and circular economies, logistics concepts, the global sustainable development framework, the quality-of-life perspective and crosscutting views. Moreover, the course will tackle the concepts which are bridging the macro and micro perspectives, like circular economy as well as urban system sustainability.

PD. Dr. habil. A. Melkonyan

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The lecture will cover the following subjects:

1. Introduction to Environmental Economics

- Introduction to Climate Change and its impact
- Sustainable Development: Definition and its history, sustainability in global context
- Alternative economics, measurement of societal progress, GDP criticism, growth debate, Steady state economies, Prosperity without growth

2. Sustainable Supply Chain Management

- Sustainability in Business Models: Micro Perspective
- Business models: Definition
- Sustainable Business models and innovations for sustainability
- Corporate citizenship & Corporate Social Responsibility
- Enablers of sustainable business models: Sustainable supply chain governance and logistics infrastructure
- Some case studies

3. Sustainable Urban Systems and their components

- Definition of Urban systems Sustainable and Smart Cities
- Technologies to enhance sustainability as urban scale

4. Circular Economy as a bridge between macro and micro perspectives

- Introduction to Circular Economy
- Closed-loop supply chains
- Logistics (Reverse Logistics) as enabler of circular economy
- Circular Business Models: Best Cases

5. Methodological toolbox

- Introduction to different types of sustainability assessment tools
- Hand-on tools and methods to develop sustainable supply chain concepts based on the best-case practices: e.g. Scenario to strategy development, design thinking techniques, business model canvas

6. Wrap-up and presentation of working groups on sustainability initiatives

Completion Requirements:

- Active participation in the lectures
- Presentation of working groups in the last session
- Reports on private basis reflecting on literature and take-home messages from 4 modules (on your choice)

Credit points: 5 ECT

Skills to be developed:

- Strong conceptual skills in sustainability science both at macro level and at micro level
- Design thinking skills to starting your own initiative on sustainability
- Development of system thinking at different system levels (like urban systems, environmental systems, sustainability systems)
- International competences to tackle and present sustainability ideas
- Competencies to act as a teamwork-player to get engaged with interdisciplinary and international students

Timing of the course: All the lectures will take place from 10:15 to 13:00 with 30 mins break after the first hour

27.01.22 / 31.01.22 / 03.02.22 /07.02.22
/10.02.22 /14.02.22

Registration Deadline: 27.01.22 10:00 am
Registration: ani.melkonyan-gottschalk@uni-due.de

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