FH Salzburg
Betriebswirtschaft

Syllabus

Course title	Sustainable Supply Chain Management
Instructor Name & Contact Information	Andreas Herzog, andreas.herzog@hz.group Daniel Rass, daniel.rass@porsche.co.at
Study Program / Course ID	International Supply Chain Management BWL-B / 238575
Semester, Study Year	Fall/Winter Term
ECTS / SWS (Semester Credit Hours) / Contact units	ECTS 5 / SWS 2 / EH 28
Course Type	IL
Prerequisites	B2 GERF in Englisch
Language of Instruction	Englisch
Moodle course- ID (SPA)	238575
Course recognition contact	Prof. (FH). Dr. Ursula Kraus, MBA
Attendance criterion	75%

Grading scale		**Assessment mode & weighting**
Note	**Prozent**	1. 1. participation in class (e.g. discussion, presentation): 20% 2. 2. final presentation case study: 80%
1 – Excellent	93 – 100%	
2 – Good	80 – 92%	
3 – Satisfactory	79 – 65%	
4 – Adquate	64 – 50%	
5 – Fail	0 – 49%	
80% of the assessment based on the final presentation on 09.12.2025.		

Course description:

1. Introduction and definition of relevant technical terms such as supply chain management, strategic sourcing, sustainability and supply chain resilience. In addition, various levers in supply chain management are explained and discussed, including their effective use.

2. Procurement 4.0: Examination of technological change in procurement, including digitalization, data management and category management. A case study on the development of a category strategy is presented.

3. Business implications of sustainable supply chain management: analysis of concepts and models in the field of sustainable supply chains, including the circular economy, and their integration into business practice.

4. Introduction to Distributed Ledger Technology (DLT): explaining the technology and presenting examples of how it can improve supply chain resilience and contribute to sustainability.

Learning Outcomes:

Students will be equipped to introduce and define the relevant technical terms of supply chain management, strategic procurement, sustainability and supply chain resilience.

Students will develop an understanding of technological change in procurement, with a particular focus on the context of Procurement 4.0, and will be able to articulate the significance of digitalisation, data management and category management.

Students will understand the business implications of sustainable supply chain management and be able to explain and integrate concepts and models in the field of sustainable supply chains, including the circular economy.

The students will be introduced to Distributed Ledger Technology (DLT) and will be expected to demonstrate an understanding of how this technology can impact supply chain resilience to ensure sustainability. Furthermore, attendees will have the opportunity to observe practical applications of DLT.

It is expected that students will be able to demonstrate the ability to plan, conduct data analysis and present a logistics optimisation project. In order to achieve this, they will utilise relevant concepts and examples.

AI policy:

Here are the Guidelines for the Use of Artificial Intelligence in Teaching and Studies:
https://myfhs.fhsalzburg.ac.at/display/REK/Einsatz+von+KI+in+Lehre+und+Studium+%7C+AI+in+Teaching+and+Studies

Recommended literature and course materials:

Faccia, A. & Petratos, P., 2021. Blockchain, Enterprise Resource Planning (ERP) and Accounting Information Systems (AIS): Research on e-Procurement and System Integration. *MDPI*, 23 Juli, pp. 1-17.

Hughes, A., Park, A., Kietzmann, J. & Archer-Brown, C., 2019. Beyond Bitcoin: What blockchain and distributed ledger technologies mean for firms. *Business Horizons*, pp. 273-281.

Krmac, E., 2019. *Sustainable Supply Chain Management.* Rijeka: In Tech.

Wang, Y., Men, S. & Guo, T., 2021. Application of Blockchain Technology in Value Chain of Procurement in Manufacturing Enterprises. *Wireless Communications and Mobile Computing*, 31 Dezember, pp. 1-8.

Wellbrock, W. & Ludin, D., 2019. *Nachhaltiges Beschaffungsmanagement: Strategien - Praxisbeispiele - Digitalisierung.* Wiesbaden: Springer.

Learning support provided by teachers:

The instructors provide continuous support throughout the course via email and Teams. Students can expect timely responses to questions and guidance on course materials and assignments. Additionally, optional virtual office hours are offered to discuss individual challenges and deepen understanding of complex topics

Feedback on learning activities:

Students receive structured feedback on their participation in discussions and presentations to foster active engagement and continuous improvement. Detailed feedback on the final case study presentation is provided, highlighting strengths and areas for development to support learning progress and practical application of concepts.

Lectures:

Lectures combine theoretical foundations with practical examples to ensure a comprehensive understanding of sustainable supply chain management. Interactive elements such as case studies, group discussions and real-world applications are integrated to encourage critical thinking and active participation