

X72 SUSTAINABLE SUPPLY CHAIN MANAGEMENT

COURSE OUTLINE

1. GENERAL

SCHOOL	ECONOMIC SCIENCES		
DEPARTMENT	ECONOMICS AND SUSTAINABLE DEVELOPMENT		
LEVEL OF STUDY	Undergraduate		
COURSE UNIT CODE	X72	SEMESTER OF STUDY	
COURSE TITLE	Sustainable Supply Chain Management		
COURSEWORK BREAKDOWN		TEACHING WEEKLY HOURS	ECTS Credits
Lecture		3	7.5
COURSE UNIT TYPE	Scientific area		
PREREQUISITES :			
LANGUAGE OF INSTRUCTION/EXAMS:	English		
COURSE DELIVERED TO ERASMUS STUDENTS	YES		
MODULE WEB PAGE (URL)			

2. LEARNING OUTCOMES

<p>Learning Outcomes</p> <p>This course introduces students to the concept of sustainable supply chain management (SSCM). Sustainable supply chain management involves integrating environmentally and financially viable practices into the complete supply chain lifecycle, from product design and development, to material selection, (including raw material extraction or agricultural production), manufacturing, packaging, distributing, storing, warehousing as well as usage, recycling and lastly disposal. This module develops understanding on the complex nature of sustainability and explores current as well as future trends within sustainable supply chain management. The core premise of this module is that businesses are subjected to increasing pressures to demonstrate their social and environmental credentials by operating a sustainable supply chain. This highlights a key criterion of a responsible company</p> <p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> ■ Understand the complex term of sustainability and its application to the supply chain from multiple dimensions ■ Demonstrate an awareness of environmental, social and ethical aspects of Supply Chain Management ■ Show critical understanding of how sustainability links with efficiency and competitive advantage, influencing practices, business models and strategies implemented ■ Plan for and justify application of sustainability factors when making operations and supply chain decisions
<p>General Skills</p> <ul style="list-style-type: none"> • Search, analyze and synthesize data and information, using the necessary technologies • Adaptation to new situations • Decision making • Independent work • Teamwork • Exercising criticism and self-criticism

- Promoting free, creative and inductive thinking
- Communication skills in written and oral speech, using arguments in work, presentations and public discussions. Exercising criticism and self-criticism

3. COURSE CONTENTS

- Understanding the complex nature of sustainability
- Sustainability and future trends
- Industry 4.0 And innovations aiding supply chain sustainability
- Sustainable sourcing
- Sustainable stages of the supply chain management
- Sustainable operations and supply chain management as competitiveness factors
- Measuring environmental impacts in supply chains
- Reverse logistics and closed-loop supply chain
- Business models and strategy in sustainable supply chains and stakeholders
- Business implications of sustainability practices in supply chains
- The social dimension of sustainable supply chains
- Operational aspects of efficiency in sustainable supply chain

4. TEACHING METHODS - ASSESSMENT

MODE OF DELIVERY	Lectures in the classroom	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY	Dynamic powerpoint slides e-class support	
TEACHING METHODS	Method description	Semester Workload
	Lectures	39
	Assignments Focused on Applying Methodologies and Analyzing Case Studies in Small Student Groups	33
	Teamwork in a case study.	50
	Independent Study	65.5
	Total Course	187.5
ASSESSMENT METHODS	I. Final written examination (60%) including: <ul style="list-style-type: none"> - Short answer questions - Essay Questions - Comparative evaluation of theory and frameworks. - Teamwork Presentation (40%) 	

5. RESOURCES

- Recommended Books::

9. Melanie E. Kreye (2023) Sustainable operation and supply chain management, Routledge,
10. Ramanathan, R., & Ramanathan, U. (Eds.). (2020). *Sustainable Supply Chains: Strategies, Issues, and Models*. Springer.
11. Steven M. Leon (2013) Sustainability in Supply Chain Management Casebook: Applications in SCM (Operations Management) 1st Edition ISBN-13: 978-0133367195
12. David B. Grant, Chee Yew Wong, Alexander Trautrim (2017) *Sustainable Logistics and Supply Chain Management*, Kogan Page Publisher, ISBN-13 : 978-0749478278
13. Johnsen, T. E., Howard, M., & Miemczyk, J. (2018). *Purchasing and supply chain management: A sustainability perspective*. Routledge.

- Recommended Article/Paper Resources:

1. Min, S., Zacharia, Z. G., & Smith, C. D. (2019). Defining supply chain management: in the past, present, and future. *Journal of Business Logistics*, 40(1), 44-55.
2. Saeed, M. A., & Kersten, W. (2019). Drivers of sustainable supply chain management: identification and classification. *Sustainability*, 11(4), 1137.
3. Kot, S. (2018). Sustainable supply chain management in small and medium enterprises. *Sustainability*, 10(4), 1143.
4. Dubey, R., Gunasekaran, A., Papadopoulos, T., Childe, S. J., Shibin, K. T., & Wamba, S. F. (2017).

Sustainable supply chain management: framework and further research directions. *Journal of cleaner production*, 142, 1119-1130.