



Supply Chain Operations

The course will take place online and in presence. For information on how to access the online sessions and further course material, see ILIAS.

Course Description

Buying products and using services is part of our daily life. We buy books, groceries, and computers and we use telephones, watch movies, and fly on planes. When doing so, we demand high quality and good service at a low price. Supply chain management addresses these topics. Supply chain management is about designing, producing, delivering and selling products and services – and about doing so profitably. It has emerged as one of the most powerful business subjects and successful companies all over the world are using supply chain management to improve quality, increase customer service, reduce cost and build new revenues.

The course focuses on operational and coordination issues. The course consists of lectures, case studies, a project, and an exam.

In the case study based part of the course, the concepts that are covered in the lectures are applied to solving unstructured problems that real companies have faced. The cases prepare students to identify improvement opportunities that exist in actual supply chains, to quantify the improvements that various supply chain management approaches offer, to overcome implementation barriers, and to control supply chain performance.

Course Administration

Class times Monday, 16.00-17.30 HS XXV (WiSo)
Wednesday, 10:00-11:30 HS XXV (WiSo)
Thursday, 14:00-15:30 HS XXV (WiSo)
(see course agenda below for exact dates)

Faculty Prof. Dr. Ulrich W. Thonemann
Telephone: +49-221-470-7935
E-mail: Ulrich.Thonemann@uni-koeln.de
Office hours: by appointment

Teaching assistant Laura Maria Poreschack, M.Sc. M.A.St.
Telephone: +49-221-470-6237
E-mail: laura.poreschack@uni-koeln.de
Office hours: by appointment

Assignments Students have to hand in a project assignment and a case study report in groups of 4 – 5.

Deadlines Please refer to the submission deadlines on ILIAS.



Grade	The course will count 6 credit points (LP). The grading consists of a project (25%), a case study (15%) and a final exam (60%). There will be 100 bonus points translating into 5% of the final grade.
Exam	01 June 2024
Language	The lectures and discussion sessions are taught in English.
Prerequisites	Interest in the field and working knowledge of quantitative approaches in business administration.

Course Literature

The case study is copyrighted. Therefore, we cannot provide the case for copying. It is available on Harvard Business Online. You need to create an account and purchase the case online.

Case Study

<https://hbsp.harvard.edu/import/1162954>

Inventory Management

Thonemann (2015), "Operations Management", Pearson.

The Bullwhip Effect: Causes and Cures

Lee et al. (1997), Sloan Management Review, "The Bullwhip Effect in Supply Chains".

Holistic SCO

Axsäter (2015), Inventory Control

Revenue Management

Phillips (2005), "Pricing and Revenue Optimization", University Press: Stanford



Course Agenda

	Monday	Tuesday	Wednesday	Thursday	Friday
April	08	09	10	11	12
	Introduction & Inventory I		Inventory II	Discussion Session: Inv. Management I	
	15	16	17	18	19
			Inventory III	Discussion Session: Inv. Management II	
	22	23	24	25	26
	Beer Game Upload module: Bullwhip Effect		Deadline Inventory Project	Inventory Project Discussion	Upload module: Holistic SCO
	29	30	01	02	03
Bonus point session		<i>Holiday</i>	Discussion Session: Holistic SCO	Upload module: Revenue Management I	
May	06	07	08	09	10
	Supply Chain Applications II		Discussion Session: Revenue Management I	<i>Holiday</i>	Upload module: Revenue Management II
	13	14	15	16	17
			Discussion Session: Revenue Management II		
	20	21	22	23	24
	<i>Holiday</i>	<i>Holiday</i>	<i>Holiday</i>	<i>Holiday</i>	<i>Holiday</i>
	27	28	29	30	31
Deadline questions for the Q&A		Q&A	<i>Holiday</i>		