

MGT-526

Supply chain management

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Cursus	Sem.	Type
Management, Technology and Entrepreneurship minor	E	Opt.
Managmt, tech et entr.	MA2, MA4	Opt.
Systems Engineering minor	E	Opt.

Language of teaching	English
Credits	4
Withdrawal Session	Unauthorized Summer
Semester	Spring
Exam	During the semester
Workload	120h
Weeks	14
Hours	3 weekly
Lecture	3 weekly
Number of positions	60

It is not allowed to withdraw from this subject after the registration deadline.

Summary

This course introduces key concepts in supply chain management. It uses a combination of case studies, simulation exercises, formal lectures and group discussions to illustrate how the various concepts can be successfully implemented in practice.

Content

1. Designing the Supply Chain to Match Value (Ocado Case)
2. Supply Chain Simulation Exercise (The Beer Game)
3. Leveraging Information Flows (7-11 Japan Case)
4. Introduction to Inventory Control Models
5. Designing for Supply-Chain-Responsiveness (Obermeyer Case)
6. Global Supply Chain Management Simulation
7. Supply Chain Planning (Industry Speaker)
8. Rebuilding the Logistics Platform (Lego Case)
9. Managing a Supply Chain Turnaround (Sky Deutschland)
10. Supply Chain Environmental Management (Unilever Case)
11. SmarterChains Technology Road Mapping Exercise
12. Digitally-Enabled Supply Chains (Tetra Pak Case)
13. A Digital Foundation for Fashion Supply Chain Success (Zalando Case)
14. FINAL ESSAY Writing Challenge held during last class session

Note: Individual case assignments might still be updated

Keywords

Supply Chain Management, Case Studies and Inventory Control, Industry 4.0

Learning Outcomes

By the end of the course, the student must be able to:

- Assess / Evaluate supply chain case examples
- Judge supply chain management practises
- Analyze decision alternatives
- Propose solution options
- Present solution approach

- Model inventory control problem

Transversal skills

- Demonstrate the capacity for critical thinking
- Communicate effectively, being understood, including across different languages and cultures.
- Make an oral presentation.
- Use a work methodology appropriate to the task.
- Write a scientific or technical report.

Teaching methods

An important share of the course relies on case studies. The latter then serve as a basis for discussion in class, to reveal the key concepts and to provide theoretical perspective. Moreover, other tools such as simulation exercises, more formal introduction to supply chain theory, as well as some glimpse on recent trends in the field are used to introduce you to the supply chain management.

Expected student activities

Active class participation, group discussion, and class presentations.

Assessment methods

Continuous assessment combining:

15%: written assignment 1

2 x 20%: two individual written assignments of type 2

45%: final individual essay (open book)

Supervision

Office hours	No
Assistants	Yes
Forum	No

Resources

Virtual desktop infrastructure (VDI)

No

Bibliography

Reading packet

Websites

- <http://tom.epfl.ch>

Moodle Link

- <https://go.epfl.ch/MGT-526>