

MGT-526

**Supply chain management**

Seifert Ralf

| Cursus  | Sem.     | Type |
|---|----------|------|
| Energy Management and Sustainability              | MA2, MA4 | Opt. |
| 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                 | Unauthorized        |
| Session                    | Summer              |
| Semester                   | Spring              |
| Exam                       | During the semester |
| Workload                   | 120h                |
| Weeks                      | 14                  |
| <b>Hours</b>               | <b>3 weekly</b>     |
| Courses                    | 3 weekly            |
| <b>Number of positions</b> | <b>60</b>           |

**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. Supply Chain Challenges (Philips Case)
  4. Leveraging Information Flows (7-11 Japan Case)
  5. Introduction to Inventory Control Models
  6. Designing for Supply-Chain-Responsiveness (Obermeyer Case)
  7. Supply Chain Portfolio Management (Hilti Case)
  8. Global Supply Chain Management Simulation
  9. Rebuilding the Logistics Platform (Lego Case)
  10. Outsourcing and Supplier Relationships (Fregon Case)
  11. Supply Chain Environmental Management (Unilever Case)
  12. Introduction to Supply Chain Finance (Nestlé Russia Case)
  13. Mass Customization Challenges (mi-adidas Case)
  14. FINAL EXAM given during last class session
- Note: Individual case assignments might still be updated.

**Keywords**

Supply Chain Management, Case Studies and Inventory Control

**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:  
25% on class participation  
30% individual written assignments  
45% final exam during the semester

### Supervision

|              |     |
|--------------|-----|
| Office hours | No  |
| Assistants   | Yes |
| Forum        | No  |

### Resources

#### Bibliography

Reading packet

#### Websites

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