**EPFL**

MGT-487     **Complex problem solving in organizations**

Chevallier Arnaud

| Cursus | Sem. | Type |
|---|---|---|
| Managmt, dur et tech | MA2 | Obl. |

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|---|---|
| Language of teaching | English |
| Credits | 2 |
| Withdrawal | Unauthorized |
| Session | Summer |
| Semester | Spring |
| Exam | During the semester |
| Workload | 60h |
| Weeks | 14 |
| **Hours** | **1 weekly** |
| Courses | 1.14 weekly |
| **Number of positions** | **32** |

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

**Remark**

Cours donné sur le campus IMD

**Summary**

As a professional and eventually an executive, you will face a variety of complex problems that require you to think strategically. This course enables you to develop your strategic thinking by giving you a step-by-step process and actionable tools applicable to any complex challenge.

**Content**

This course enables you to improve your problem-solving skills throughout the entire journey, including:
- Framing, where you identify what the problem is
- Exploring, where you identify potential solutions as well as what matters to you and your stakeholders
- Deciding, where you select the solution that, overall, best meets your needs.

**Keywords**

strategy
strategic thinking
decision-making
problem solving

**Learning Outcomes**

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

• Establish a comprehensive problem-solving approach

• Restate the perceived problem in a synthetic frame

• Analyze the root causes of the problem and update the frame accordingly

• Construct a clear map of the set of potential solutions

• Structure the analysis of the potential solutions

• Decide which solution offers the best tradeoffs

• Synthesize the analysis in a compelling argument

**Transversal skills**

- Access and evaluate appropriate sources of information.
- Continue to work through difficulties or initial failure to find optimal solutions.
- Demonstrate a capacity for creativity.
- Demonstrate the capacity for critical thinking

## Teaching methods

This course uses a mix of flipped lectures (videos), class discussions, and projects

## Assessment methods

Class participation, including contributions to help others (in your group and other groups) â## 20% (individual)
Quality of report for Frame analysis â## 15% (group)
Quality of report for Explore analysis â## 15% (group)
Quality of report for Decide analysis â## 15% (group)
Quality of synthesis report â## 15% (group)
Final reflection on key learnings and action plan moving ahead â## 20% (individual)

## Resources

### Virtual desktop infrastructure (VDI)
No

### Bibliography
Chevallier, A. (2016). Strategic thinking in complex problem solving. Oxford, UK, Oxford University Press.

### Ressources en bibliothèque
- Strategic Thinking in Complex Problem Solving / Chevallier

### Websites
- http://clearerthinking.org
- http://powerful-problem-solving.com