FIN-401 **Introduction to finance**

Morellec Erwan

| Cursus | Sem. | Type |
|---|---|---|
| Financial engineering | MA1, MA3 | Obl. |

| | |
|---|---|
| Language of teaching | English |
| Credits | 6 |
| Session | Winter |
| Semester | Fall |
| Exam | Written |
| Workload | 180h |
| Weeks | 14 |
| **Hours** | **5 weekly** |
| Courses | 2 weekly |
| Exercises | 2 weekly |
| Project | 1 weekly |
| **Number of positions** | |

### Remark

(IF master stud. only)-MA1

### Summary

The course provides provides an introduction to valuation techniques, investment decisions, asset valuation and portfolio choice, financing decisions, derivatives pricing, and sustainable finance.

### Content

1. Introduction to finance
2. Discounting, and interest rates
3. Introduction to the valuation of bonds and stocks and to sustainable finance
4. Risk and return
5. Evaluating firms and projects
6. Financing firms and projects
7. Financial derivatives

### Keywords

Corporate Finance, Valuation, Risk and Return, Sustainable Finance

### Learning Prerequisites

#### Required courses

None

#### Recommended courses

None

### Learning Outcomes

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

- Implement standard valuations models used in financial markets
- Recall the trade-off between risk and return and develop an ability to make portfolio decisions
- Develop an ability to analyze and evaluate firms and investment projects
- State the determinants of financing decisions for firms and investment projects

- Describe derivatives markets and their benefits and costs
- Derive derivatives prices

### Transversal skills

- Plan and carry out activities in a way which makes optimal use of available time and other resources.
- Assess one's own level of skill acquisition, and plan their on-going learning goals.
- Access and evaluate appropriate sources of information.

### Teaching methods

Lectures, homework, exercises, case studies

### Expected student activities

attendance at lectures, handing in homeworks, completing case studies, class participation

### Assessment methods

15% Homework
25% Case study, including the case presentation
60% Final exam
Homework and case study are open book. Final exam is closed-book.

### Supervision

| | |
|---|---|
| Office hours | Yes |
| Assistant.e.s | Yes |
| Forum | No |

### Resources

#### Virtual desktop infrastructure (VDI)

No

#### Bibliography

Berk and DeMarzo, Corporate Finance: Global Edition Pearson, 5th edition

#### Ressources en bibliothèque

- Find the references at the Library

#### Notes/Handbook

Lecture notes for each class will be available via moodle.

#### Moodle Link

- https://go.epfl.ch/FIN-401

### Prerequisite for

- Advanced derivatives
- Interest rate & credit risk models
- Derivatives
- Financial econometrics

- Investments
- Private equity and venture capital