# **Course unit: Finance**

### Course metadata

- Title in French: Finance
- Course code: tba
- ECTS credits: 3
- Teaching hours: 72h
- Type: advanced course
- Language of instruction: English
- Coordinator: tba
- Instructor(s): Grégoire Hug (WeeFin), Bolanjinva Randrianarizafy (Natixis), Julien Belon (Arx Corporate Finance), Vincent Bonnamy (La Banque Postal Asset Management)
- Last update 24/03/2021 by C. Pouet

# **Brief description**

This course is taught by highly skilled professionals in finance.

This course unit is divided into three parts:

- Portfolio management (24 hours) taught by Grégoire Hug.
- **Credit risk** (24 hours) taught by Bolanjinva Randrianarizafy: this part is dedicated to credit risk and its role in banking regulation.
- **Applied finance** (24 hours) taught by Julien Belon and Vincent Bonnamy: this part is about the theoretical aspects of corporate and market finance applied in real life.

## Learning outcomes

- Understand the similarities in the concepts of market and corporate finance
- Understand how finance products can be used to manage risk
- Know how to organize an investment process
- Know how to evaluate and to value a company
- Understand the definition, measurement and pricing of credit risk
- Know how banks are regulated
- Know the various jobs of finance

## **Course content**

#### Portfolio management

- 1. Introduction to portfolio management
- 2. Equity Investing and investment process
- 3. Fixed Income Investing basics
- 4. Fixed Income Investing advanced
- 5. Alternative asset classes and Performance Measurement

- 6. Asset management trends
- 7. Project: Portfolio construction

#### Credit risk

- 1. Introduction: bonds and OTC transactions
- 2. Modeling defaults: structural models and ratings
- 3. Structured financing: plain-vanilla, asset financing, securitization etc.
- 4. Banking regulation on credit risk

#### Applied finance

- 1. Applied corporate finance From startup to IPO... and LBO
  - Introduction / Presentation
  - Application areas of
  - Accounting Basic Methods
  - Valuation methods
  - $\circ\,$  We know how to value a company. Now what? Different types of operation
  - Introduction to Fintech and start-up ecosystem
- 2. Applied market finance Options: Pricing, Hedging & Risk Management
  - Market finance: players and products
  - Future and forward: pricing & hedging
  - $\circ\,$  Options: replication and pricing
  - Sensitivity of options: the greeks
  - Volatility and stress tests

# Bibliography

Check the availability of the books below at Centrale Méditerranée library.

- 1. Portfolio management
  - Roland Portait, Patrice Poncet (2014). Market Finance.
  - Franck J. Fabozzi (2012). The Handbook of Fixed Income Securities.
- 2. Credit risk
  - Gourieroux C. and Tiomo, A. (2007) Risque de crédit : une approche avancée, Economica.
  - Merton R. (1998) Continuous time finance, Blackwell Publishers.
  - Bruyere R., Cont R., Fery L., Jaeck C. and Spitz T. (2005). Credit derivatives, Wiley.
  - Roncalli T. (2016). Risk Management & Financial Regulation (website)
- 3. Applied finance
  - Vernimmen, P. (2021). Finance d'entreprise. Dalloz.
  - $\circ\,$  Hull, J. (2018). Options, Futures, and Other Derivatives, 10th Edition. Pearson

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