

Alternative Finance

**ECTS** : 3

**Description du contenu de l'enseignement :**

The aim of this course is to propose an out-of the box perspective upon the financial markets and to explore the financial universe beyond the traditional investments like equity, bonds, currency... . We will focus the course on the products and technics used at the fringe of finance including crowdfunding, peer-2-peer finance, shadow banking, Bitcoin, social and environmental impact products.... Throughout this course students will learn about alternative investment supports and alternative financing solutions. The objectives of this lecture are:

- To understand the mechanism of alternative risks: global warming, catastrophic events including on the economy, ...
- To explore new area including Environmental, Social, and Governance (ESG) Investment, cryptocurrency etc..
- To get familiar with modelling methods specific to alternative finance.

Course outline: 1. Alternative finance 101 Two faces of the same coin: as investors or as issuers. 2. Modelling methods for alternative finance

- Introduction to the non-Gaussian universe
- Real Option Theory
- Extreme value theory

3. Crypto-currencies: an alternative financial universe 4. Environmental, Social, and Governance (ESG) Investment 5. Cryptocurrency : an alternative financial universe. 6. Alternative capital markets and Fintechs: Focus on Crowdfunding and P2P finance 7. Alternative Risk Transfer

- Climate risks
- Insurance and re-insurance. Focus on CAT Bonds

8. Fintech workshop (industry view)

**Compétence à acquérir :**

Knowledge on the modelling methods specific to alternative finance.

**Mode de contrôle des connaissances :**

Project

**Bibliographie, lectures recommandées :**

- Alexandridis, A. K. and A. D. Zaprakis, 2013: Weather Derivatives, Springer, 300 pages.
- Barrieu P., and L. Albertini, 2009: The Handbook of Insurance-Linked Securities, Wiley, 398 pages.
- Frunza, M., 2010: Carbon allowances: A new financial asset, Editions universitaires europeennes, 164 pages.
- Guthrie G., Real Options in Theory and Practice, 2009, OUP, 432 pages.

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**Université Paris Dauphine - PSL** - Place du Maréchal de Lattre de Tassigny - 75775 PARIS Cedex 16