Financial instruments and derivatives

**ECTS** : 3

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

This course covers the analysis of derivative instruments such as forwards, futures, swaps and options. By the end of the course, students will have good knowledge of how these contracts work, how they are used and how they are priced. A particular attention will be given to the analysis of employee stock options.

**Compétence à acquérir :**

- Be able to describe and explain the fundamental features of a range of key financial derivative instruments
- Be able to decide which securities companies should use for hedging and/or speculative purposes
- Understand the no-arbitrage principle and its role in pricing financial forwards and futures
- Understand the binomial approach in pricing European and American options
- Understand the Black-Scholes option formula for the price of a European option
- Understand how to price employee stock options

**Mode de contrôle des connaissances :**

Midterm exam (40% of the final grade) and Final exam (60% of the final grade).

**Bibliographie, lectures recommandées :**

- Options, Futures, and Other Derivatives, 11th Edition, Hull, John C., Pearson-Prentice Hall (2021). - Student Solutions Manual for Options, Futures, and Other Derivatives, 11th Edition, Hull, John C., Pearson-Prentice Hall (2021).

**Document susceptible de mise à jour - 05/11/2026**
**Université Paris Dauphine - PSL -** Place du Maréchal de Lattre de Tassigny - 75775 PARIS Cedex 16