









# DECO 25A13 - CRYPTOCURRENCIES AND BLOCKCHAIN: NEW CHALLENGES FOR BANKS AND CENTRAL BANKS

#### **COURSE DESCRIPTION**

This course aims at providing an understanding of the recent development of cryptocurrencies and blockchain and the consequences on the banking sector and central banking. The design of cryptocurrencies challenges the traditional banking and financial system in its very existence. Cryptocurrencies built on the blockchain works as on a decentralized scheme disrupting the existence hierarchical system. This is a very complex topic since the banking and financial system greatly influences the state of the economy. Financial intermediation underwent through major changes over the past 30 years because of financial deregulation and globalization and they are now facing a major challenge with the development of the blockchain. Central banks are concerned by the development of cryptocurrencies since it affects their monopoly power over money creation. There is a strong debate over the nature of cryptocurrencies and their ability to compete with official currencies. The course discusses the potential disruptive impact of cryptocurrencies. The course starts with an introduction to the traditional banking and financial system, focusing on the specificities of the US system. Then the course will focus on the question of central banking in the post-crisis era. A special attention will be dedicated to the quantitative easing monetary policies and their unintended consequences. Cryptocurrencies - the Bitcoin in particular - were born as a way to develop an alternative to the existing system judged corrupted and biased by human action. Cryptocurrencies is more than just the design of a new monetary system, it offers an alternative design for the organization of the society based on decentralization and trust. The course will investigate the consequences of the further adoption on banks and central banking.

#### **ENSEIGNANTS**

#### LANGUAGE OF TUITION

English

### **SEMESTER**

Spring 2021-2022

#### **COURSE VALIDATION**

Press Review: 30% Team Presentation: 30% Final Paper: 40%

## LECTURES CONSEILLÉES / RECOMMENDED READINGS

## LECTURES PRINCIPALES / MAIN READINGS

Mishkin F. S (M), The Economics of Money, Banking and Financial Markets, (12h edition, Pearson Addison Wesley, 2018)

Emprunter / Borrow

- Mishkin, Frederic S. The economics of money, banking, and financial markets. Eleventh edition, global edition. Boston: Pearson. 2016. (lien vers l'édition 2016)
- Mishkin Frederic S. The economics of money, banking and financial markets. Twelfth edition global edition. Boston, Mass. Columbus, Ohio Paris [etc: Pearson. 2019. (lien vers l'édition 2019)

Aleksander Berentsen and Fabian Schär, A Short Introduction to the world of Cryptocurrencies, Saint Louis Federal Reserve Review, 2018

## LECTURES SECONDAIRES / MAIN READINGS

https://www.bis.org/

Emprunter / Borrow

Bank for International Settlements

https://www.ecb.europa.eu/home/html/index.en.html

Emprunter / Borrow

o European Central Bank

https://www.federalreserve.gov/

Emprunter / Borrow

The Federal Reserve System

https://www.alt-m.org/

Emprunter / Borrow

Alternative Monetary

https://coindesk.com

https://cointelegraph.com