

Title: Cryptocurrency: From a Cypherpunk Experiment to a Geopolitical Economic Force

Description:

Sixteen years ago, during a global financial crisis a mysterious author sent a paper entitled “Bitcoin: A Peer-to-Peer Electronic Cash System” to a mailing list of cybersecurity enthusiasts. That single paper and the technological model that it described launched a financial revolution that has touched all elements of the global financial landscape and has led to the definition of numerous new and unique monetary instruments. The topic has attracted a new audience for discussion as a result of policies and proposals that have been proposed by the new administration of the US government. This course will explore:

- Why is it important to discuss cryptocurrency at the time?
- What are the basic technologies behind cryptocurrencies?
- What some current and future real-world applications of cryptocurrencies?
- What are the personal and social implications of cryptocurrency?
- What can be expected in the cryptocurrency ecosystem in the future?

Weekly Course Outline

Session One (March 31, 2025):

- A brief history of the origins of cryptocurrency
- Public perceptions of cryptocurrency – crime, scandals, etc. that have shaped opinion
- A high level overview of the technologies underlying cryptocurrency
- Blockchain and its relationship to cryptocurrencies

Session Two (April 7, 2025):

- A technical overview of how cryptocurrency and blockchain operate
- The different “flavors” of cryptocurrency (e.g., Bitcoin, Ethereum, altcoins, stablecoins, etc., etc.)
- Beyond currency – smart contracts, decentralized finance (DeFi) and non-fungible tokens (NFTs)

Session Three (April 14, 2025):

- How cryptocurrency mining works and why it is an environmental and political issue
- “Getting onboard with cryptocurrency” – buying, selling, using, and saving
- Implications of cryptocurrency ownership – security, volatility

Session Four (April 21, 2025):

- Cryptocurrency becomes a political issue
- Cryptocurrency regulations and controls
- Cryptocurrencies vs. national digital currencies or central bank digital currencies (CBDCs)
- Discussions about a “Bitcoin Strategic Reserve”
- Possible scenarios for the future of cryptocurrencies

Instructor Contact Information

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