##### Chapter Key Concepts:

Chapter 1:

Key Concepts:

1. Course Introduction:

* Explore the course objectives and expectations for the Bitcoin Diploma.

1. Reflective Activity - Defining Money:

* Engage in a reflective exercise by providing five answers to key questions about money.

1. Class Discussion - Why we need money:

* Participate in a class-wide discussion exploring the fundamental necessity of money.
* Share and compare individual perspectives on the importance of money.
* Lay the groundwork for understanding the role of money in economic systems.

Chapter 2:

Key Concepts:   
  
1. Understanding Money:

* Explore the fundamental definition and concept of money.
* Discuss the diverse perspectives within the class to grasp the multifaceted nature of money.

2. Functions, Properties, and Types:

* Delve into the functions, properties, and types of money.
* Recognize the importance of these aspects in defining and utilizing money.

3. Psychology of Money:

* Understand the psychological aspects of money, including scarcity, time preference, and tradeoffs.
* Engage in the "Time Preference" activity to relate psychological elements to real-life scenarios.

Chapter 3:

1. Introduction to Money's History and Evolution:

* Explore the history and evolution of money. Understand how ancient forms of trade led to the development of the currency we use today.

1. Barter Game Activity:

* Engage in a hands-on barter game experience to grasp the challenges of direct exchange and appreciate the need for a more efficient system.

1. Evolution of Currency:

* Explore the transition from ancient forms like shells and beads to the emergence of coinage and paper money. Follow the journey from paper to plastic, unraveling the evolution of currency throughout history.

1. Digital Currency Revolution:

* Discover the current pinnacle of money's evolution – digital currency.
* Understand how it exists only in electronic form, enabling instantaneous, low-cost transactions globally.
* Learn about the significant role Bitcoin played in solving early challenges of digital currencies, making them ready for worldwide use.

Chapter 4:

1. Fiat Money Origins:

* Explore the origins of fiat money through a brief historical overview, understanding how it became a dominant form of currency.

1. The Fiat System:

* Grasp the fundamental aspects of the fiat system, including its nature as a monetary system by decree, the role of fractional reserve banking, and the key players controlling this system.

1. Fractional Reserve Banking Activity:

* Engage in the Fractional Reserve Banking activity to gain insights into how this system operates, highlighting its reliance on debt and the implications for the broader economy.

1. Controllers and Beneficiaries:

* Identify the entities that control the fiat system and examine who benefits from its functioning, providing a deeper understanding of the dynamics at play.

1. CBDCs and the Future:

* Explore the concept of Central Bank Digital Currencies (CBDCs) as a glimpse into the potential future developments of fiat money, recognizing the ongoing evolution of monetary systems.

Chapter 5:

1. Decreasing Purchasing Power:

* Understand the concept of monetary inflation and its impact on purchasing power. Engage in the Effects of Inflation: An Auction Activity to experience the effects firsthand.

1. Global Debt Burden and Social Inequality:

* Explore the dual impacts of the global debt burden and social inequality. Recognize the individual and societal consequences, emphasizing the loss of purchasing power and the widening wealth gap.

1. The Fiat System's Consequences Activity:

* Participate in the Consequences of the Fiat System activity, shedding light on the broader repercussions of the current monetary framework.

1. The Cypherpunks and Decentralization:

* Learn the Cypherpunks' story and their motivation for seeking a decentralized currency. Differentiate between centralized and decentralized systems, gaining insights from a brief history of digital currencies.

1. Central Bank Digital Currencies (CBDCs):

* Explore the evolving landscape of Central Bank Digital Currencies (CBDCs) and their potential impact on the future of money.

Chapter 6:

1. Satoshi Nakamoto and Bitcoin's Creation:

* Explore the mysterious figure of Satoshi Nakamoto and the origin story of Bitcoin, understanding the initial motivations behind its development.

1. How Bitcoin Works:

* A look into the mechanics of Bitcoin, including the Nakamoto Consensus Mechanism. Identify the key players in the Bitcoin network, such as miners, nodes, users, developers, and projects, and grasp the collaborative dynamics between them.

1. Class Activity - Consensus Building:

* Engage in the Consensus Building in a Peer-to-Peer Network activity to gain practical insights into how consensus is achieved within the Bitcoin network.

1. Bitcoin as Sound Digital Money:

* Examine Bitcoin's role as sound digital money, discussing its evolution, functions, properties, and participate in a class discussion on whether Bitcoin qualifies as sound money.

1. Embracing Personal Responsibility:

* Emphasize the concept of personal responsibility in the context of Bitcoin, encouraging an understanding of individual roles and accountability within the decentralized ecosystem.

Chapter 7.

1. Peer-to-Peer Transactions:

* Engage in decentralized transactions to experience the core principles of Bitcoin exchanges.

1. Bitcoin Wallet Types:

* Differentiate between open source, closed source, custodial, and noncustodial wallets, understanding the role of keys in security.

1. Setting Up a Bitcoin Wallet:

* Learn the essential steps to download, create keys, and backup a Bitcoin wallet for secure transactions.

1. Acquiring Bitcoin:

* Explore methods like peer-to-peer transactions and exchanges, discussing privacy concerns related to KYC processes.

1. Saving and DYOR:

* Understand saving in Bitcoin as a store of value and the importance of independent research for informed decision-making.

Chapter 8:  
  
1. Introduction to Lightning Network:

* Recognize the evolution of Bitcoin through technologies like the Lightning Network, enhancing its capabilities.

2. Lightning Wallet Types:

* Differentiate between open source, closed source, custodial, and noncustodial Lightning wallets for varied user preferences.

3. Setting Up a Lightning Wallet:

* Learn the essential steps to set up a Bitcoin Lightning Wallet, facilitating faster and more scalable transactions.

4. Lightning Transactions:

* Explore the process of sending and receiving Lightning transactions, emphasizing the speed and efficiency of the Lightning Network.

5. Hands-On Activity:

* Engage in a practical Lightning wallet relay race, promoting a dynamic understanding of Lightning Network transactions.

Chapter 9:  
  
1. The Bitcoin Ledger:

* Understand the concept of a decentralized ledger facilitated by nodes and miners, ensuring transparency and security.

2. Public and Private Keys:

* Explore the significance of cryptographic security in Bitcoin transactions through public and private keys, along with an activity demonstrating SHA 256 hashing.

3. The UTXO Model:

* Grasp the Unspent Transaction Output model as a fundamental aspect of Bitcoin's transaction process.

4. Bitcoin Nodes and Miners:

* Look into the roles of nodes and miners in maintaining the Bitcoin network, covering aspects like issuance, scarcity, halving, and difficulty.

5. How Bitcoin Transactions Work:

* Gain insight into the entire lifecycle of a Bitcoin transaction, involving the sender, receiver, nodes, miners, and the mempool, with a dedicated activity focused on the mempool.

Chapter 10:  
  
1. Philosophical Underpinnings of Bitcoin:

* Explore the foundational philosophy behind Bitcoin, understanding how it emerged as a response to economic challenges, with a focus on its impact on financial freedom and how it differs from traditional currencies.

2. Bitcoin's Future:

* Delve into the potential trajectory and future developments of Bitcoin as a revolutionary digital currency.

3. Diploma Reflection:

* Summarize key takeaways from the Bitcoin Diploma, encouraging students to reflect on their journey and insights gained.
* Activities include watching a video on "why bitcoin?" and revisiting Chapter 1's questions to assess personal growth in understanding.