



Course Syllabus

Course Code	Course Title	ECTS Credits
BLOC-516DL	Principles of Money, Banking and Finance	10
Prerequisites	Department	Semester
BLOC-511DL	Digital Innovation	Fall/Spring
Type of Course	Field	Language of Instruction
Required	Finance	English
Level of Course	Lecturer(s)	Year of Study
2 nd Cycle	Dr. Ifigenia Georgiou, Dr. George Dotsis Industry Fellow: Mr. Yiannis Menelaou	1 st
Mode of Delivery	Work Placement	Corequisites
Distance Learning	N/A	N/A

Course Objectives:

The first part of the course aims to provide a solid conceptual framework to help students understand how the banks and monetary economies operate. The material covered in this course will provide answers to key questions such as: What is money? Where does its value come from? How is money created and destroyed? How does the banking system work? How is monetary policy implemented and what is money printing? It will deal with various popular misconceptions about money and banking and will demonstrate that the various monetary phenomena and the functioning of the banking system can be described relatively simply and comprehensively using the arithmetic of the balance sheets, that is, through the crediting/debiting method of the balance sheets of the basic economic units.

The second part of the course aims to provide a conceptual understanding of the function of financial markets, the flow of funds, time value of money, and valuation of securities. It will analyse the institutional framework through a discussion of the theoretical background to the structure and performance of the financial system. The course provides an insight into the integration of digital currencies (DC) in financial markets and a solid conceptual framework to be able to compare and contrast digital currencies, cryptocurrencies or other forms of technology based innovative payments systems with traditional forms of money and conventional banking systems.

Learning Outcomes:

After completion of the course students are expected to be able to:

- Explain how money is created in modern economies.
- Describe the various forms of money.
- Understand the balance sheet of the banking sector.
- Understand banking risks and bank solvency.
- Understand the balance sheet of the central bank.
- Understand and the mechanics of monetary policy and the creation of central bank digital currencies.
- Compare and contrast digital currencies with traditional forms of money.
- Describe the investment environment and define the types of financial markets.
- Explain how financial markets work and the role of the key players.
- Apply different company valuation techniques to determine share prices and study digital currency exchanges;
- Describe the characteristics of different types of debt securities and be able to price them;
- Discuss valuation issues pertaining to digital currencies.

Course Content:

1. **Definitions of Money**
 - Financial assets versus real assets
 - Properties of money
 - Money as an IOU
 - Brief overview on the historical evolution of money
2. **Balance Sheets and Money Creation**
 - Central Bank and commercial bank balance sheets
 - Interbank transactions
 - Settlement systems
 - Creation and distraction of money
 - Stable coins
3. **The Banking System**
 - Banking risks and bank solvency
 - Saving, investments and bank financing
 - Securitization
4. **Monetary Policy**
 - Goals of monetary policy
 - Open market operations
 - Quantitative easing
 - Central bank digital currencies
5. **Financial Markets - The Setting**
 - Overview of Financial Instruments
 - Primary and secondary markets

- Money and capital markets
 - Equity markets
 - Stock market indices
 - Debt markets
 - Derivatives
 - 6. **Valuation of Financial Instruments**
 - The Efficient Market Hypothesis
 - Valuation of Equity Securities
 - Valuation of Debt Securities
- Digital Currencies and Valuation Issues

Learning Activities and Teaching Methods:

Lectures, Seminars, Assignments, Live Discussions, Forum Discussion

Assessment Methods:

Online quizzes, Participation in forum debates, Final Exam

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Investments, 11th edition	Bodie, Z., Kane, A. and Marcus, A. J.		2024	ISBN10: 1264412665 ISBN13: 9781264412662
Lecture notes on "Money, Banking and Cryptocurrencies"	G. Dotsis			ISBN10: 1266837310 ISBN13: 9781266837319
Selected Readings				
Topic 1				
<ul style="list-style-type: none"> • McLeay, M., Radia, A., Ryland, T. (2014α), "Money in the Modern Economy: An Introduction", Bank of England Quarterly Bulletin 54 (1) 4-13. 				
<u>Further Reading:</u>				
<ul style="list-style-type: none"> • Goodhart, C.A.E. (1998), "The Two Concepts of Money: Implications for the Analysis of Optimal Currency Areas", European Journal of Political Economy 14 (3) 407-432 				

- Graeber, D. (2011), *Debt: The First 5000 Years*, New York: Melville House Publishers
- Hudson, M. (2004), "The Archaeology of Money: Debt versus Barter Theories of Money's Origins", in: Wray, L.R. (ed.), *Credit and State Theories of Money*, Cheltenham, UK: Edward Elgar, 99-127.

Topic 2

- McLeay, M., Radia, A., Ryland, T. (2014β), "Money Creation in the Modern Economy", Bank of England Quarterly Bulletin 54 (1) 14-27.
- Rule, G. (2015), "Understanding the Central Bank Balance Sheet", CCBS Handbook of the Bank of England, no 32.
- An Introduction to Libra (white paper).

Further Reading:

- Part One from Saunders, A., Cornett, M.M. (2008), *Financial Institutions Management. A Risk Management Approach*, 6th ed., McGraw-Hill International Edition.

Topic 3

- Coval, J., Jurek, J., Stafford, E. (2009), "The Economics of Structured Finance", *Journal of Economic Perspectives* 23 (1) 3-26.
- Thakor, A. (2015) "[The Financial Crisis of 2007-09: Why Did It Happen and What Did We Learn?](#)" *Review of Corporate Finance Studies*, 4, pp. 115-205.
- Thakor, A. (2019) "[Fintech and Banking: What Do We Know?](#)" *Journal of Financial Intermediation*, forthcoming.
- Thakor, A. (2018) "[Post-Crisis Regulatory Reform in Banking: Address Insolvency Risk, Not Illiquidity!](#)" *Journal of Financial Stability*, 37, pp. 107-111.

Further Reading:

Part Three (ch. 18,19,20) from Saunders, A., Cornett, M.M. (2008), *Financial Institutions Management. A Risk Management Approach*, 6th ed., McGraw-Hill International Edition.

Topic 4

- Bernanke, B., Gertler, M. (1995), "Inside the Black Box: The Credit Channel of Monetary.
- Haldane, A, M Roberts-Sklar, T Wieladek and C Young (2016) "QE: the story so far", Bank of England Staff Working Papers, no 624.

Further Reading:

Krishnamurthy, A. and A. Vissing-Jorgensen (2011) "The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy," *Brookings Papers on Economic Activity*, Fall, pp. 215–265.

Topic 5

From the Bodie et al. (2024) book (chapters in parentheses):

Obligatory:

- The Investment Environment (BKM1)
- Asset Classes and Financial Instruments (BKM2)

Further Reading:

- How Securities Are Traded (BKM3)
- Mutual Funds and Other Investment Companies (BKM4)
- Naif, I., Oqla, M., & Sameer, L. (2024). Inspecting the efficiency of cryptocurrency markets: New evidence. *Asian Economic and Financial Review*, 14(1), 29-42.
- Baranidharan, S. (2024). Investor Behaviour, Market Efficiency, and Regulatory Challenges in Digital Currency Investments: A Comprehensive Literature Review. *Digital Currency Assets and Challenges to Financial System Stability*, 144-177.

Topic 6

- From the Bodie et al. (2024) book (chapters in parentheses):
- Efficient Market Hypothesis (BKM11)
- Bond pricing (BKM 14)

Further Reading:

- Dowling, M. (2022). Fertile LAND: Pricing non-fungible tokens. *Finance Research Letters*, 44, 102096.
- Cai, C. W., Xue, R., & Zhou, B. (2024). Cryptocurrency puzzles: A comprehensive review and re-introduction. *Journal of Accounting Literature*, 46(1), 26-50.

Note: an updated list of readings is provided at the end of each lecture given the fact that Digital Currency and Blockchain Technologies constitute recent and rapidly evolving disciplines.